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# SEARS HOLDINGS

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Lance Franke  
Sr. Counsel, Regulatory Affairs  
Sears Holdings Management Corporation  
3333 Beverly Road, B6-324A-A  
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July 22, 2011

**VIA EMAIL AND CERTIFIED MAIL**

Carl Brickner  
Case Developer, Mail Stop SFD-7-5  
U.S. Environmental Protection Agency, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105  
Email: Brickner.Carl@epa.gov

**Re:** Request for Information Pursuant to CERCLA Section 104(e);  
San Fernando Valley Area 2 Superfund Site - Glendale Chromium Operable Unit;  
Sears, Roebuck and Co. facilities  
12121 Victory Avenue, North Hollywood, CA  
11961 Sherman Way, North Hollywood, CA 91605

Dear Mr. Brickner:

Sears, Roebuck and Co. ("**Sears**") is in receipt of Request for Information Pursuant to CERCLA Section 104(e) (the "**104(e) Request**") for two Sears facilities related to the San Fernando Valley Area 2 Superfund Site—Glendale Chromium Operable Unit. As indicated in the 104(e) Request, Sears is the current or former operator of retail facilities at Victory Blvd. 91606<sup>1</sup> ("**Victory Blvd.**") and 11961 Sherman Way, North Hollywood, CA 91605<sup>2</sup> ("**Sherman Rd.**").

As you know, Sears is a national retailer that sells a wide range of goods ranging from lawn and garden equipment to apparel. Often attached to Sears' retail stores are facilities specific to automotive parts, service and repair commonly known as "Sears Auto Centers" ("**SAC**"). Additionally, Sears has various facilities called "Product Repair Service" ("**PRS**") facilities where customers can repair various equipment and tools purchased from Sears' retail locations. The facility located at the Victory Blvd. location is a Sears' retail store as well as a SAC. The facility formerly operated by Sears at the Sherman Rd. location was a PRS location. Although in its daily operation of retail stores, SACs and PRS facilities, Sears

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<sup>1</sup> Please see Question 3 to this 104(e) Request response for clarification on the correct address of this facility.

<sup>2</sup> Please see Question 3 to this 104(e) Request response for clarification on the correct address of this facility

does generate and responsibly dispose of hazardous materials, Sears facilities are not large industrial facilities which generate large amounts of hazardous pollutants. From our responses you will find that we similarly have not used, generated or disposed of chromium in our operations of the facilities subject to this 104(e) Request.

In our due diligence related to the 104(e) Request we worked with key members of our Environmental Affairs, Facility Services and Major Maintenance and Real Estate teams to obtain available relevant documentation and information requested by this 104(e) Request. Additionally, these internal Sears teams worked with relevant third parties to obtain available information and documents responsive to this 104(e) Request. Despite Sears making its best effort to respond to this 104(e), as described in greater detail in Question 2 below, Sears underwent a business combination transaction with Kmart Holding Corporation ("**Kmart**") and Sears Holdings Corporation ("**Holdings**") in 2005 (the "**Merger**"). A consequence of the Merger is that Sears changed many of its previous operations and changed many of its previous vendors and practices. As a result, it has been difficult to find all-inclusive documentation responsive to this 104(e) request. Notwithstanding the forgoing, we believe that you will find from the responses and supporting documentation provided herein, there is no evidence of chromium being released by Sears into the environment at either facility subject to this 104(e) Request.

**Notwithstanding the forgoing, below are Sears' responses to the 104(e) Request:**

Question (1): See portion of each response entitled "SOURCE(s)" and Question 14 of this response.

Question (2): On March 24, 2005, each of Kmart and Sears entered into simultaneous mergers (the "**Mergers**") with newly formed separate subsidiaries of Holdings, which was incorporated on November 23, 2004 in order to facilitate the business combination transaction between Kmart and Sears. Kmart and Sears have been separate wholly-owned subsidiaries of Holdings since the consummation of the Mergers. Kmart and Sears together hold one hundred percent of the shares of Sears Holdings Management Corporation ("**SHMC**"). SHMC was formed in 2005 to provide the Sears Holdings Corporation family of companies a more efficient structure for ongoing management of the enterprise. SHMC focuses on retail management best practices and leverages knowledge and industry expertise throughout the business. SHMC provides management services for the benefit of its various affiliates and acts as the agent for both Sears and Kmart. Please see Exhibit H, for an organizational chart of the above listed entities. Further information regarding the relationship between the above listed entities can be found in the 10-K filings of Holdings in 2010 located at this link: <http://www.sec.gov/Archives/edgar/data/1310067/000119312511062911/d10k.htm>. If necessary, we can also provide copies of the various formation and merger documents upon further request.

Sears, through its agent SHMC, is the respondent to this 104(e) Request.

○ **SOURCE(s):**

- Dorian Williams, VP & Deputy General Counsel; 3333 Beverly Rd., B6-237B-A, Hoffman Estates, IL 60179; (847) 286-1129



- <http://www.sec.gov/Archives/edgar/data/1310067/000119312511062911/d10k.htm>
- Exhibit H—Org Chart of Kmart, Sears, Holdings and SHMC

Question (3): The owners of the facilities during the period of time Sears operated the facilities are as follows:

- **12121 Victory Avenue, North Hollywood, CA**—Our records indicate that the actual address for this facility is “12121 VICTORY BLVD, NORTH HOLLYWOOD, CA 91606”.

Our records show that Sears has owned this property since the date the store began operating on September 22, 1951 and continues to own the property as of the date of this response.

- **11961 Sherman Way, North Hollywood, CA**— Our records indicate that the actual address for this facility is “11961 SHERMAN RD., NORTH HOLLYWOOD, CA 91606”.

Our records indicate that this property was co-owned by Simha Lainer, Sara Lainer, Sigmund Loew and Regina Loew as of June 21, 1961 when Sears became a tenant. On or around June 16, 1970, it appears that Sigmund Loew and Regina Loew ceased being co-landlords with Simha Lainer and Sara Lainer. On or around May 27, 1981, Simha Lainer and Sara Lainer ceased being the landlord and Lanier Enterprises became the landlord. Our records further show that Sears exited the facility in September 2001 and terminated its lease as of February 20, 2002. See Page 2 of Exhibit A for dates of Sears’ exit, and Exhibit B for landlord/tenant agreements summary.

- **SOURCE(s):**
  - Domenica Cresap, Asset Manager, Real Estate; 3333 Beverly Rd., Hoffman Estates, IL
  - Page 2 of document entitled “Site Walk-Through of Former Sears Product Services Center Unit Number 8248, 11961 Sherman Rd., North Hollywood, CA (attached hereto as Exhibit A)
  - Summary of lease details for former PRS Unit# 8248 (attached hereto as Exhibit B)
  - Bruce Kaye, Manager, Environmental Services; 3333 Beverly Rd., B5-350A-A, Hoffman Estates, IL; (847) 286-7810

Question (4):

**Sherman Rd.:** Please refer to that certain section entitled “Heating/Cooling” in Exhibit A which details the condition of the facility, upon Sears’ exit from the premises in September 2001, as observed by an independent company, ENSR International. As described in the Heating/Cooling section of Exhibit A, the air conditioning for this facility was eight electrical roof-mounted units. The units were observed mounted in the ceiling rafters by ENSR International during their site visit. Based on these observations, much of the information requested for this property by

Question 4 of this 104(e) Request are not applicable. Nevertheless, below are our responses to the various Subparts to Question 4:

**Subpart (a):** See Exhibit B, which indicates that Sears began its lease of the premises as of June 21, 1961, and as indicated in Exhibit A, exited the facility as of September 2001. We have no documentation directly responsive to this question, however, we assume from the above documents that the cooling system was in operation from June 21, 1961 through September 2001.

**Subpart (b):** Not applicable, there were no cooling towers in operation at this facility.

**Subpart (c):** Not applicable, there were no cooling towers in operation at this facility.

**Subpart (d):** Not applicable; see details set out above related to this facility having eight electrical roof-mounted air conditioning units.

**Subpart (e):** Not applicable, electrical systems do not circulate water.

**Subpart (f):** Not applicable, electrical systems do not circulate water.

**Subpart (g):** Not applicable, electrical systems do not circulate water.

**Subpart (h):** Not applicable, electrical systems do not circulate water.

**Subpart (i):** Not applicable, electrical systems do not circulate water.

**Subpart (j):** Not applicable, electrical systems do not circulate water.

**Subpart (k):** Not applicable, electrical systems do not circulate water.

**Subpart (l):** We have no responsive maps, drawings, diagrams, plans, blueprints, photographs, or flow charts related the eight electrical roof-mounted air conditioning units. Please see Exhibit A for the few diagrams and/or photographs that we have which may contain peripherally responsive information.

**Subpart (m):** Not applicable, electrical systems do not have waste streams generated by their operation.

**Subpart (n):** Not applicable, electrical systems do not circulate water.

**Subpart (o):** Not applicable, electrical systems do not purge steam.

**Subpart (p):** Not applicable, electrical systems do not circulate water.

**Subpart (q):** Not applicable, electrical systems do not use chromium.

• **SOURCE(s):**

- Bruce Kaye, Manager, Environmental Services; 3333 Beverly Rd., B5-350A-A, Hoffman Estates, IL; (847) 286-7810
- Page 4 of document entitled "Site Walk-Through of Former Sears Product Services Center Unit Number 8248, 11961 Sherman Rd., North Hollywood, CA (attached hereto as Exhibit A). This document was prepared and provided to Sears by ENSR INTERNATIONAL 27755 Diehl Road, Suite 100 Warrenville, Illinois 60555.

**12121 Victory Blvd., North Hollywood, CA:**

**Subpart (a):** Please see attached as Exhibit C the various maps, drawings, diagrams, plans, blueprints, photographs, and flow charts related to the cooling systems in place at this facility, where it shows that the design of the cooling systems was completed in January 1950. As previously indicated in Question 3, our records show that Sears commenced operating this facility on September 22, 1951. Based on this information, we believe that the cooling system at this facility has been in operation since September 22, 1951; however, our research has revealed no direct documentation relating to this specific point.

**Subpart (b):** Please see response to Subpart (a) of this question as the response is the same.

**Subpart (c):** Based on the information set forth in Subpart (a) to this question, we believe that the cooling tower at this facility was constructed/installed sometime between January 24, 1950 and September 22, 1951; however, our research has revealed no direct documentation relating to this specific point. Please see the diagram in Exhibit C entitled "AIR COND. EQUIPMENT SCHEDULES" for more details related to the cooling tower specs. From this document, we can tell that the cooling tower is an "EQUIVALENT PRITCHARD & CO. MODEL NO. 1B12 BQR 18". It appears that the cooling towers are constructed as follows:

- Metal Basin, Struts and Distribution Decks
- PVC Fill
- Fiberglass Drift Eliminators

**Subpart (d):** Please see Exhibit C for more detail but the cooling system used in this facility appears to be an "open recirculating cooling system" as it utilizes cooling towers. For further detail on the cooling system components and specifications, Please see the diagram in Exhibit C entitled "AIR COND. EQUIPMENT SHCEDULES".

**Subpart (e):** Please see attached as Exhibit D, copies of all MSDS sheets for substances used in the cooling system and cooling tower; please note that the earliest MSDS sheet we have for such products is 11/09/2000. Our records indicate that the only products used in the cooling systems are: Sodium dichloro-s-triazinetriane; Bromo, chloro-5,5-dimethylhydantion; B939L; CT-531; C876L; and STABROM 909 Biocide.

**Subpart (f):** As can be seen from the MSDS sheets provided as Exhibit D, none of the substances added to the water and/or cooling systems at this facility contained chromium. Our research has revealed no information related to substances, other than those delineated in Subpart (e) to this question, which were added to the water and/or cooling systems at this facility.

**Subpart (g):** Sears does not maintain the cooling systems, nor the water treatment therefor, at this facility; such maintenance is performed by subcontractors. Our records show that from 2005-2006, Advanced Chemical Technology ("ACT"), 8728 Utica Ave., Rancho Cucamonga, CA (800-527-6907) performed these services. We have been unable to find records prior to these dates. Please see attached as Exhibit E, select "Service Reports" from ACT related to their service of the cooling systems at this facility.

Our records show that from 2007 to present, Cascade Water Services ("Cascade"), 113 Bloomingdale Rd, Hicksville, NY 11801, (516-932-3030), has been maintaining the cooling system and water treatment at this facility. Please see attached as Exhibit E, select "Service Reports" from Cascade related to their service of the cooling systems at this facility.

Cascade's current process is as follows:

Both **CASCADE C-876L** and **StaBrom 909** are automatically feed to the open re-circulation system via the controller.

**CASCADE B-939L** is manually fed to the closed chilled and hot systems via a pot feeder.

**CASCADE C-876L** is stored in the Chiller Room in a 30/Gallon plastic tank.

**StaBrom 909** is stored in the Chiller Room in a 5/Gallon plastic pail.

**CASCADE B-939L** is stored in the Chiller Room in a 5/Gallon plastic pail.

**Subpart (h):** See Subpart (g).

**Subpart (i):** To our knowledge, we have not been required to file any such requested reports

**Subpart (j):** To our knowledge, no chromium was ever detected in the water used in the cooling system or cooling towers at this facility.

**Subpart (k):** To our knowledge, no tests requested were ever conducted.

**Subpart (l):** See Exhibit C.

**Subpart (m):** By design, open systems evaporate a significant amount of pure (*distilled*) water. The contaminants typically found in municipal make-up waters remain in the system and upon reaching a pre-determined maximum conductance, are purged (*bleed*) to prevent the formation of efficiency robbing deposition.

A microprocessor continuously monitors the conductivity of the system water. When the system conductivity reaches a prescribed set point the controller activates a solenoid bleed valve discharging the concentrated system water to the sewer. As the system loses water, a float valve opens sending fresh municipal make-up water into the system. This process continues until the system conductivity is reduced approximately five-percent below the purge set point.

**Subpart (n):** The volume and frequency of the cooling water blow-down discharged from the cooling system and the waste storage methods for the blow-down are as follows:

Online Tonnage	225
Recirculation Rate	900 GPM
$\Delta T$	10 °F
Estimated Load	75%
Hrs/Day Operation	10

Days/Year	365
Daily Evaporation	4,050 Gallons
Daily Bleed	2,025 Gallons
Daily Make-up	6,075 Gallons

The actual bleed frequency is determined by the ambient temperature and the heat load on the cooling system.

The bleed flows directly into the municipal sewer. There is no waste storage.

**Subpart (o):** The system water is bled via a conductivity controller and solenoid bleed valve. The stream is taken directly from the discharge side of the cooling tower recirculation pump. The solenoid bleed valve is located downstream of the controller. The tower bleed flows directly into the municipal sewer.

**Subpart (p):** To our knowledge, no such analyses have been performed.

**Subpart (q):** To our knowledge, no such analyses have been performed.

• **SOURCE(s):**

- Bruce Kaye, Manager, Environmental Services; 3333 Beverly Rd., B5-350A-A, Hoffman Estates, IL; (847) 286-7810
- Sam Wildstein, Director of Health, Safety and Environment; Cascade Water Services, 113 Bloomingdale Rd, Hicksville, NY 11801; Phone: (516) 932-3030 or (914) 419-0378; [swildstein@cascadewater.com](mailto:swildstein@cascadewater.com)
- Chris Lubner; *Cascade Water Systems, Inc*, 1938 N Batavia Street, Unit H Orange, CA 92865-4140; Office: (714) 282-0077; Cell: (562) 547-6280; [clubner@cascadewater.com](mailto:clubner@cascadewater.com)
- Advanced Chemical Technology, 8728 Utica Ave., Rancho Cucamonga, CA; Phone: (800) 527-6907
- Albermarle Corporation, 451 Florida St., Baton rouge, LA; (800) 535-3030
- Todd Lemmert, DVP, Facility Services & Major Maintenance; 3333 Beverly Rd., A2-361A-A, Hoffman Estates, IL; (847) 286-6546
- Exhibit C—Various maps, drawings, diagrams, plans, blueprints, photographs, and flow charts related to the cooling systems in place at Victory Blvd.
- Exhibit D—Copies of all MSDS sheets for substances used in the cooling system and cooling tower at Victory Blvd.
- Exhibit E—“Service Reports” from ACT and Cascade related to their service of the cooling systems at Victory Blvd.

Question (5): To our knowledge, we have no records that chromium, or any substances containing chromium, were utilized in any operations at either facility subject to this 104(e) Request.

**Subpart (a):** None, to our knowledge.

**Subpart (b):** None, to our knowledge.

**Subpart (c):** None, to our knowledge.

**Subpart (d):** None, to our knowledge.

**Subpart (e):** None, to our knowledge.

**Subpart (f):** Please see Exhibit A for pictures and/or diagrams related to the facility located at **Sherman Rd.**; to our knowledge we are not in possession of any further maps, drawings, diagrams, plans, blueprints, as-builts, photographs, or flow charts related to the building, the operation, or piping that was connected to the building at this address.

Please see attached Exhibit C and Exhibit F for all documents responsive to this question as it relates to the facility located at **Victory Blvd.** To our knowledge we are not in possession of any further maps, drawings, diagrams, plans, blueprints, as-builts, photographs, or flow charts related to the building, the operation, or piping that was connected to the building at this address.

**Subpart (g):** To our knowledge, no requested reports or tests were performed for the site located at **Sherman Rd.**

Please see attached Exhibit G for responsive documents related to **Victory Blvd.** Exhibit G is a Preliminary Environmental Assessment Report ("PEAR") for the Proposed East Valley Middle School No. 1 site in Los Angeles, CA prepared by Earth Tech Inc. on behalf of the Los Angeles Unified School District to evaluate possible health impacts to future students and staff as the proposed site. Included in this evaluation was the Sears property located at **Victory Blvd.** as it was considered a RCRA/RCIS (Small Quantity) Generator located adjacent to the proposed school site.

In the PEAR are the results (and discussions thereof) from various tests, including those on soil samples collected from the site, which tested for various things including chromium. This PEAR concluded that chromium concentrations in the soil were not found to be problematic. Specifically, please see PEAR (see Exhibit G), section 7.2.1, paragraph 3, page 7-3, where it states "...all metal concentrations detected at the site [including chromium] were deemed to be within background concentrations."

Additionally, tests performed for this PEAR included those of the groundwater at the site. Similarly, the PEAR concluded that groundwater was not being contaminated by releases from the site. Specifically, in Section 5.2.1.2 of the PEAR it clearly states that "[b]ased on the reported depth to groundwater and the results of previous and current reports and investigations, no evidence has been found indicating a release or threatened release from the site to groundwater. Therefore, the aquifers are not known or suspected to be impacted from activities at the site."

**Subpart (h):** Not applicable as we have no record or knowledge of chromium being used in our operations at either facility.

• **SOURCE(s):**

- Bruce Kaye, Manager, Environmental Services; 3333 Beverly Rd., B5-350A-A, Hoffman Estates, IL; (847) 286-7810
- Earth Tech Inc., 100 West Broadway, Ste. 240, Long Beach, CA 90802
- Todd Lemmert, DVP, Facility Services & Major Maintenance; 3333 Beverly Rd., A2-361A-A, Hoffman Estates, IL; (847) 286-6546
- Exhibit F—Further maps, drawings, diagrams, plans, blueprints, as-builts, photographs, and/or flow charts related to the building, the operation, or piping that was connected to the building at this address at Victory Blvd.
- Exhibit G—Preliminary Environmental Assessment Report for the Proposed East Valley Middle School No. 1 site in Los Angeles, CA prepared by Earth Tech Inc. on behalf of the Los Angeles Unified School District

Question (6): The cooling system in the facility located at **Sherman Rd.** does not use water; consequently this question is not applicable to that site.

The water for the cooling system located at **Victory Blvd.** is from the municipal water system:

City of Los Angeles  
Department of Water and Power  
P.O. Box 51111  
Los Angeles, California  
90051-0100

800-DIAL-DWP (800-342-5397)  
<mailto:ccenter@ladwp.com>

Question (7): The cooling system in the facility located at **Sherman Rd.** does not use water; consequently this question is not applicable to that site.

The water used in the cooling systems and cooling tower located at **Victory Blvd.** are discharged into the municipal sewer system:

City of Los Angeles  
Board of Public Works  
Room 361-P, Mail Stop 46  
200 North Spring Street  
Los Angeles, CA 90012-4801  
(213) 978-0262

Question (8): The cooling system in the facility located at **Sherman Rd.** does not use water; consequently this question is not applicable to that site. The water for the cooling system located at **Victory Blvd.** is from the city water lines; consequently, this question is not applicable.

Question (9): To our knowledge, there have not been any releases, or suspected releases, of chromium or substances containing chromium, at or from either facility subject to this 104(e) Request.

Question (10): To our knowledge no hazardous waste-related tax has been paid by Sears for either facility subject to this 104(e) Request related to any operation from which waste containing chromium was sent to an off-site disposal facility.

Question (11): To our knowledge, no Federal, State, County, City or other local permit, license, or registration has been issued to either facility subject to this 104(e) Request concerning the storage, use, or discharge of substances containing chromium.

Question (12): To our knowledge, no documents related to warnings, fines, penalties, notices of violation, or notices of non-compliance have been sent to Sears by a Federal, State, County, or City agency or office, for the release, potential release, or perceived release of chromium or substances containing chromium at or from either facility subject to this 104(e) Request.

Question (13): To our knowledge Sears has not had any permits issued under RCRA for either facility. For the both the **Sherman R.** and **Victory Blvd.** locations we have, or have had, RCRA waste generator ID numbers, but do (did) not generate enough waste to require a RCRA permit.

- **SOURCE(s):**

- Bruce Kaye, Manager, Environmental Services; 3333 Beverly Rd., B5-350A-A, Hoffman Estates, IL; (847) 286-7810

Question (14): Below are the individuals most able to deal with these questions.

- Todd Lemmert, DVP, Facility Services & Major Maintenance; 3333 Beverly Rd., A2-361A-A, Hoffman Estates, IL; (847) 286-6546
- Bruce Kaye, Manager, Environmental Services; 3333 Beverly Rd., B5-350A-A, Hoffman Estates, IL; (847) 286-7810

Question (15): Below are the individuals most able to deal with these questions.

- Edgar Cobian [Edgar.Cobian@searshc.com](mailto:Edgar.Cobian@searshc.com) Quality Maintenance Technician ("QMT") for Sears (currently) 661-753-6792
- John Mitchell [John.F.Mitchell@searshc.com](mailto:John.F.Mitchell@searshc.com) previous QMT
- Waymond Long [Waymond.long@searshc.com](mailto:Waymond.long@searshc.com) previous QMT (prior to John Mitchell)
- Chris Lubner; *Cascade Water Systems, Inc.*, 1938 N Batavia Street, Unit H Orange, CA 92865-4140; Office: (714) 282-0077; Cell: (562) 547-6280; [clubner@cascadewater.com](mailto:clubner@cascadewater.com)



Question (16): Below are the individuals most able to deal with these questions.

- Todd Lemmert, DVP, Facility Services & Major Maintenance; 3333 Beverly Rd., A2-361A-A, Hoffman Estates, IL; (847) 286-6546
- Bruce Kaye, Manager, Environmental Services; 3333 Beverly Rd., B5-350A-A, Hoffman Estates, IL; (847) 286-7810

Sincerely,

SEARS HOLDINGS MANAGEMENT CORPORATION

By:



Lance Franke

Sr. Counsel, Regulatory Affairs

**Sears, Roebuck and Co.  
Hoffman Estates, Illinois**



**Site Walk-Through of**

**Former Sears Product  
Services Center  
Unit Number 8248  
11961 Sherman Road  
North Hollywood, California**

**ENSR INTERNATIONAL**  
27755 Diehl Road, Suite 100  
Warrenville, Illinois 60555

**April 2002**

**ENSR Document Number 05897-073-100**

**Sears, Roebuck and Co.  
Hoffman Estates, Illinois**

**Site Walk-Through of**

**Former Sears Product  
Services Center  
Unit Number 8248  
11961 Sherman Road  
North Hollywood, California**

**ENSR INTERNATIONAL**

27755 Diehl Road, Suite 100  
Warrenville, Illinois 60555

**April 2002**

**ENSR Document Number 05897-073-100**



ENSR International

27755 Diehl Road  
Warrenville, IL 60555-3998  
(630) 836-1700  
FAX (630) 836-1711  
www.ensr.com

April 19, 2002

ENSR Project No: 05897-073-100

Ms. Teresa Kee  
Sears, Roebuck and Co.  
3333 Beverly Road  
A2-239B  
Hoffman Estates, Illinois 60179

**Re: Site Walk-Through  
Former Sears Product Services Center  
Unit Number 8248  
11961 Sherman Road  
North Hollywood, California**

Dear Ms. Kee:

ENSR is pleased to transmit this letter report on the above-referenced property. This Site Walk-Through was performed pursuant to the Sears/ENSR Environmental Work Order (EWO), which was authorized on February 13, 2002. The agreed-upon objective of the investigation was to assess current on-site conditions at the above-referenced site (subject property) subsequent to Sears vacating of the property in September 2001. This investigation consisted exclusively of a site inspection and interview with a site contact.

On February 28, 2002, Ms. Brenda Miller of ENSR visited the subject property location to perform the site inspection. At the time of ENSR's site inspection, the subject property was unoccupied. Mr. Richard Allen of Sears accompanied ENSR on the site walk and answered questions. ENSR also interviewed Ms. Berma Colbert, Operating Manager with Sears.

The subject property is located at 11961 Sherman Road, in a light industrial/commercially developed area of North Hollywood, California. The subject property consists of approximately 1½ acres of land and is currently developed with an approximately 8,000-square-foot, vacant warehouse building formerly occupied by a Sears Product Services Center. Asphalt-paved parking areas and driveways are located on all sides of the subject property building to the north, south, east and west. A small landscaped area is also located along the east side of the building. No basements, sublevels, or elevators were observed onsite. The building is one story high, with brick wall construction, on a concrete foundation. The roof is of a flat wood-frame construction. A wood-walled and metal-roofed add-on is located at the northeast corner of the building, and a metal-walled and metal-roofed add-on is located on the north side of the building, both with concrete floors. An empty metal shed on a wood platform is located in the northeast corner of the subject property. Ms. Colbert reported that heating and air conditioning were formerly provided by natural gas-fired and electrical roof-mounted units.





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According to Ms. Colbert, for at least the last seven years the Sears Product Services Center consisted of offices, parts storage, and a "sales floor" (where parts and re-conditioned small household appliance, such as VCRs, were sold). Ms. Colbert reported that it has been over seven years since a repair shop operated on site, and over ten years since any automobile maintenance activities were conducted on site. Neither Ms. Colbert nor Mr. Allen was familiar with on-site activities prior to Sears' occupancy.

The building interior appears to have undergone recent asbestos abatement, and a dumpster, labeled "asbestos", was observed near the northwest corner of the building. No suspect asbestos-containing material was observed on site at the time of ENSR's site visit.

Mr. Allen and Ms. Colbert indicated that they were not aware of Underground Storage Tanks (USTs) currently on the subject property. One inoperable underground hydraulic lift and associated above ground reservoir were observed near the northeast corner of the subject property. An area of dark staining was observed on the concrete beneath the hydraulic fluid reservoir. No other notable staining was observed on site. No evidence of oil/water separators or sumps was observed on site, or reported by Ms. Colbert and Mr. Allen to be located on site.

## **SITE INSPECTION**

### **Hazardous Substances / Containers / Drums**

ENSR observed three 55-gallon drums (labeled "waste oil" and "for used oil only") near the northeast corner of the subject property. Mr. Allen reported that the drums did not belong to Sears, nor was the waste oil generated as part of Sears operations onsite. Mr. Allen indicated that the drums must belong to the building owner as they were not present at the time Sears vacated the site. No significant staining was observed on or around the drums.

### **Storage Tanks (Aboveground and Underground)**

ENSR did not observe obvious physical evidence (i.e., vent or fill pipes) indicative of USTs currently located on site. According to Mr. Allen and Ms. Colbert, no USTs are currently located on the subject property. One approximately 50-gallon above ground tank was observed in the northeast portion of the site. Piping and saw-cuts in the concrete indicate that the container was likely the hydraulic fluid reservoir for the nearby lift. An approximately 2-foot by 3-foot area of dark staining was observed on the concrete beneath the hydraulic fluid reservoir. Ms. Colbert reported that automotive maintenance activities had not been conducted on site for at least ten years. Neither Mr. Allen nor Ms. Colbert was familiar with the operation of the hydraulic lift.



Ms. Teresa Kee  
Sears, Roebuck and Co.  
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### **Hydraulic Lift Systems**

ENSR observed one out-of-service in-ground hydraulic lift in the northeast portion of the site.

<b>In-Ground Hydraulic Lifts Sears Product Services Center 11961 Sherman Road North Hollywood, California</b>					
<b>Lift Number</b>	<b>Location</b>	<b>Above ground or underground hydraulic reservoir</b>	<b>Replacement or removal date</b>	<b>Removed, Capped Off, or Present</b>	<b>Double or Single Piston</b>
1	Northeast portion of the site	Above ground	Not Applicable	Present, but inoperable	Double

One inoperable in-ground hydraulic lift and associated above ground reservoir were observed near the northeast corner of the subject property. Mr. Allen and Ms. Colbert indicated the lift was inoperable and had not been utilized for at least 10 years. Additionally, the aboveground portions of the lift had been removed. The pistons appeared to have been removed; however, the piston "sleeves" were present and uncapped. According to Mr. Allen and Ms. Colbert, no other hydraulic lifts are known to have been present on site. No significant staining was observed on the concrete in the vicinity of the hydraulic lift.

### **Odors**

ENSR did not detect obvious petroleum or other chemical odors at the time of the site inspection.

### **Pools of Liquid**

ENSR observed no standing water/fluids on the subject property.

### **Battery Area**

No evidence of battery storage areas was observed on site at the time of ENSR's site visit. Neither Mr. Allen nor Ms. Colbert was aware of batteries previously stored on site. The concrete





Ms. Teresa Kee  
Sears, Roebuck and Co.  
April 19, 2002  
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floors in the storage/warehouse area appeared to be in good condition, and no significant staining or floor drains were observed in these area.

#### **Polychlorinated Biphenyls (PCBs)**

ENSR observed three pole-mounted transformers near the southwest corner of the subject property along the west boundary of the subject property. The Los Angeles Department of Water and Power (LADWP) owns the transformers. ENSR did not observe any labels regarding the PCB content of the pole-mounted transformers at the time of the site assessment. No staining or unusual conditions were observed in association with the pole-mounted transformers.

#### **Heating/Cooling**

Ms. Colbert reported that heating and air conditioning were formerly provided by natural gas-fired and electrical roof-mounted units. What appeared to be eight air conditioning units were observed mounted in the ceiling rafters at the time of ENSR's site visit. According to Ms. Colbert, natural gas is provided by the Southern California Gas Company and electricity is supplied to the subject property by the LADWP.

#### **Stains or Corrosions**

ENSR observed dark staining, approximately four square feet in size, on the concrete beneath the hydraulic fluid reservoir located in the northeast portion of the subject property. The concrete in this area appeared to be in good condition, with no cracks noted at the time of the site inspection. However, seams were observed in the concrete associated with the underground fluid lines. Minor staining was observed on the concrete floor in the former "shop" areas. The concrete in this area appeared to be in good condition.

ENSR did not observe areas of corrosion on the subject property at the time of the site visit.

#### **Drains, Sumps and Oil/Water Separators**

ENSR observed one floor drain in the floor of the former restroom area near the center of the building. No significant staining was observed near the drain, and no fluid was observed in the drain.

A storm drain is located at the base of a loading dock outside the northwest corner of the building. The drain appeared to be filled with sand/dirt. No staining was observed.



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Sears, Roebuck and Co.  
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Mr. Allen reported that no sumps or oil/water separators are located onsite.

#### **Pits, Ponds, or Lagoons**

ENSR observed no evidence of pits, ponds or lagoons on the subject property at the time of the site walk-through.

#### **Stressed Vegetation**

ENSR observed no stressed vegetation on the subject property at the time of the site walk-through.

#### **Solid (Non-Hazardous) Waste**

No solid waste is currently being generated at the subject property. A former concrete block-walled dumpster enclosure area is located along the northern property boundary. No significant staining was observed on the concrete pad in the former enclosure area.

#### **Hazardous Waste**

Three 55-gallon drums of waste/used oil were observed in the northeast portion of the site. Mr. Allen reported that the drums were not a part of Sears operations and must have been brought on site by the property owner. Mr. Allen and Ms. Colbert reported that to the best of their knowledge, the site was not previously permitted as a hazardous waste generator.

#### **Wastewater**

Ms. Colbert reported that sanitary wastewater is discharged to the City of Los Angeles municipal system. No other wastewater was reported to be generated on site.

#### **Wells**

ENSR did not observe evidence of wells located on the subject property. Mr. Allen and Ms. Colbert indicated that to the best of their knowledge no wells are located on the subject property.





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Sears, Roebuck and Co.  
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### **Septic Systems**

ENSR did not observe evidence of a septic system located on the subject property. Mr. Allen and Ms. Colbert indicated that to the best of their knowledge no septic systems are located on the subject property.

### **Railroad Tracks**

ENSR did not observe railroad tracks on the subject property.

### **Air Emissions**

No air emissions or sources were identified during ENSR's site visit.

## **SUMMARY OF FINDINGS**

ENSR performed a site walk-through of the former Sears Product Services Center located at 11961 Sherman Road in North Hollywood, California (subject property). Based solely on the results of the site walk-through and interviews with the site contacts, the following potential environmental concern was identified:

- **Hydraulic Lift:** ENSR identified the presence of an out-of-service hydraulic lift and above ground hydraulic fluid reservoir located on the northeast portion of the site. Dark staining was observed on the concrete beneath the reservoir and the lift has not been abandoned. Ms. Colbert reported that the lift has been out of service for at least ten years.

## **STUDY LIMITATIONS**

This limited site walk-through consisted exclusively of a site inspection and interview with two Sears contacts. This letter report and all supporting field data, notes, and laboratory test data, where applicable (collectively referred to hereinafter as "information"), were prepared or collected by ENSR for its client, Sears, Roebuck and Co. ENSR's client may release the information to third parties, who may use and rely upon the information at their discretion. However, any use of or reliance upon the information by a party other than specifically named above shall be solely at the risk of such third party and without legal recourse against ENSR, its parent company, or its subsidiaries and affiliates, or their respective employees, officers or directors, regardless of whether the action in which recovery of damages is sought is based upon contract, tort (including the sole, concurrent, or other negligence and strict liability of



Ms. Teresa Kee  
Sears, Roebuck and Co.  
April 19, 2002  
Page 7

ENSR), statute or otherwise. This information shall not be used or relied upon by a party that does not agree to be bound by the above statement.

If you have any questions regarding our report or findings, please feel free to contact either of the undersigned.

Sincerely,

A handwritten signature in cursive script, appearing to read "Brenda Miller".

Brenda Miller  
Senior Environmental Analyst

A handwritten signature in cursive script, appearing to read "Brandon Vineyard".

Brandon Vineyard  
Project Manager

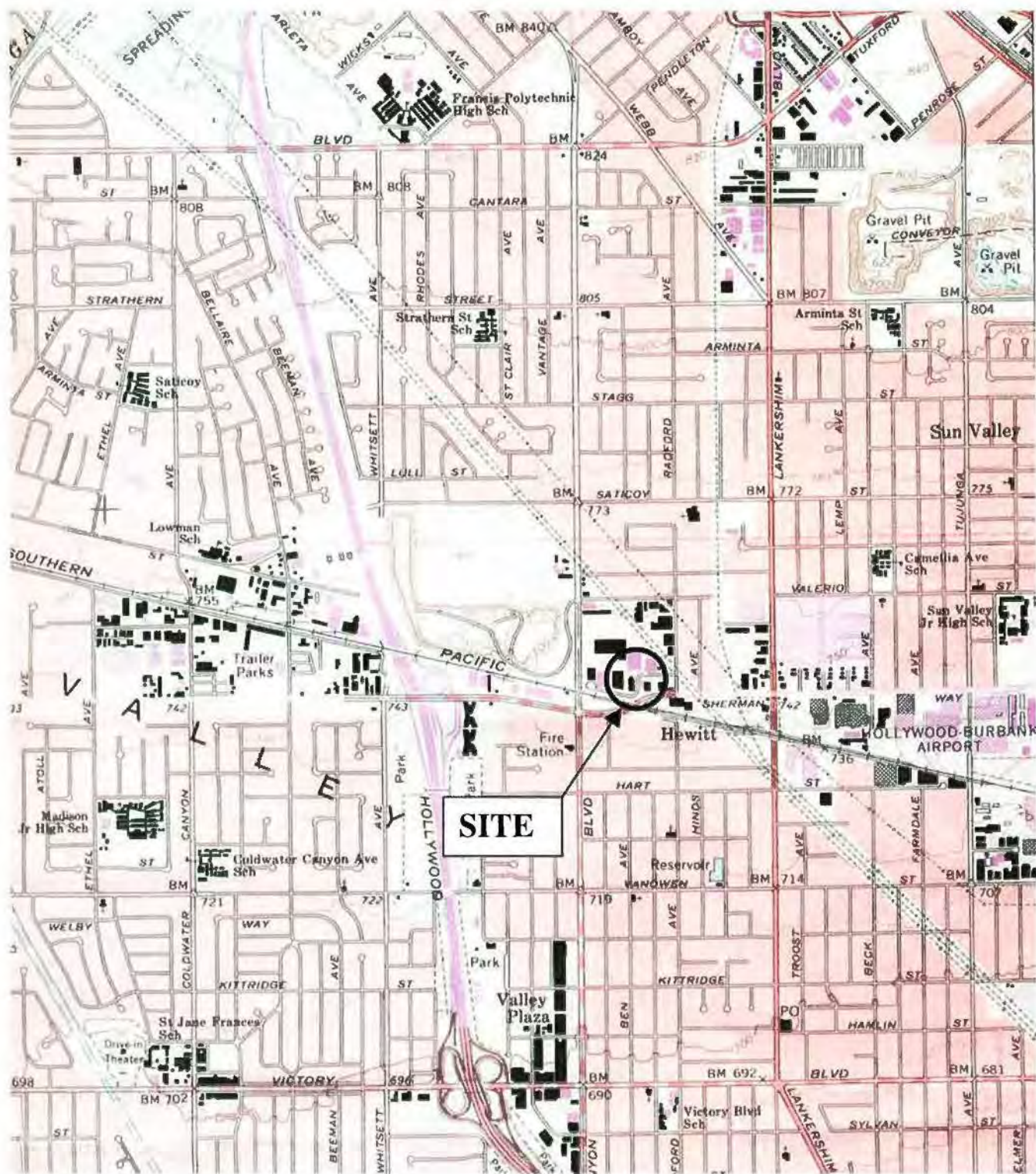
A handwritten signature in cursive script, appearing to read "Kenneth A. Roth".

Kenneth A. Roth  
Project Manager

Attachments: Site Location Map  
Site Plan  
Site Photographs  
Contract

**ATTACHMENT A**  
**SITE LOCATION MAP**





## SITE LOCATION MAP

Source: USGS Topographic Quad  
Van Nuys, California: 1972  
Scale 1:24,000

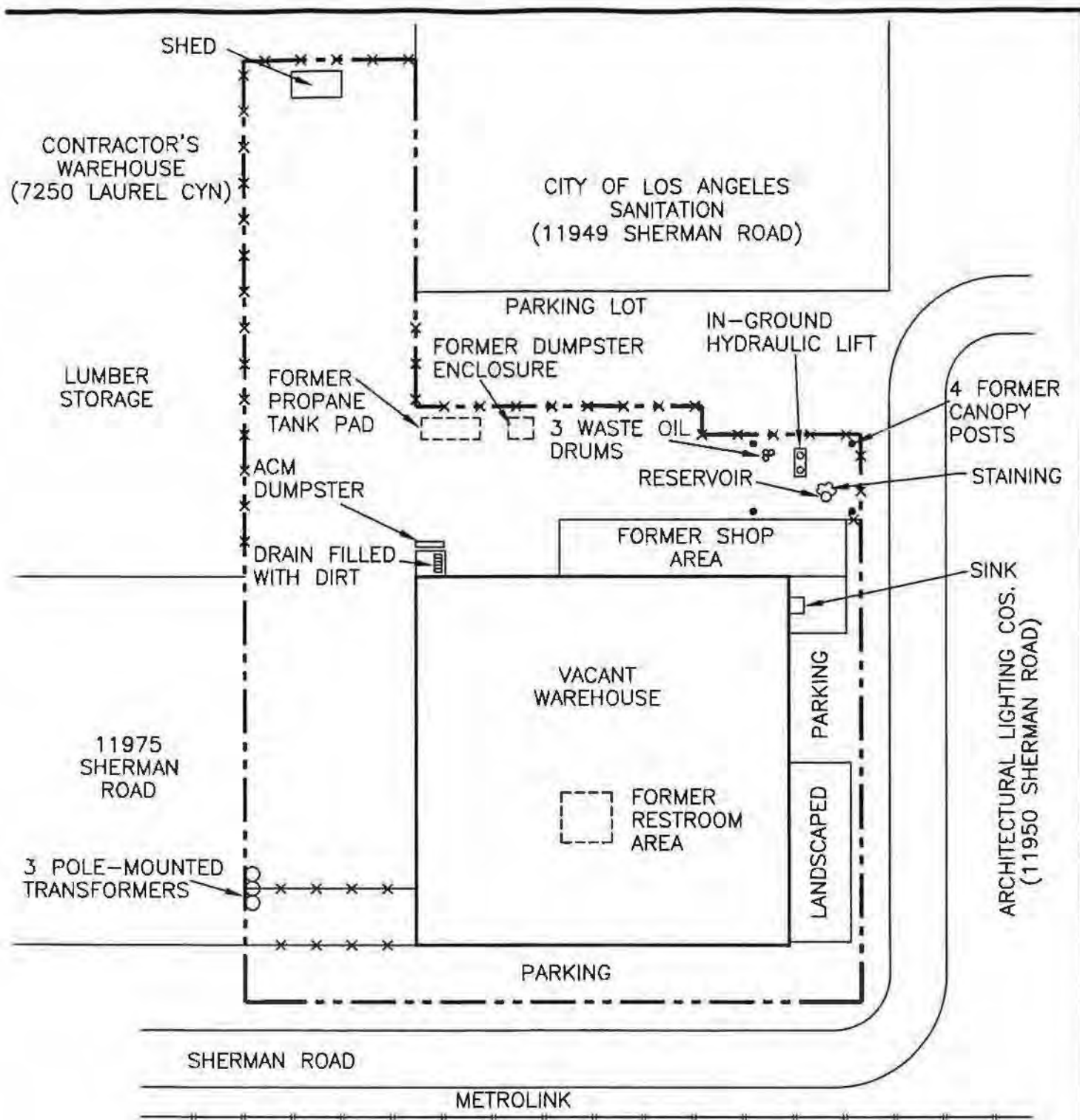
Former Sears Product  
Services Center  
11961 Sherman Road  
North Hollywood, California

FIGURE 1

**ENSR**  
INTERNATIONAL

**ATTACHMENT B**

**SITE PLAN**



**LEGEND:**

- APPROXIMATE PROPERTY BOUNDARY
- x-x-x- FENCE



NOT TO SCALE

**ENSR**  
INTERNATIONAL

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**FIGURE 2  
SITE PLAN**

Former Sears Product Services Center  
11961 Sherman Road  
North Hollywood, CA

DRAWN BY: MS	DATE: 03/04/02	PROJECT No.:
APPROVED BY:	REVISED:	05897-073-100

**ATTACHMENT C**  
**SITE PHOTOGRAPHS**





Photo 1: View of the front (south) side of the subject property facing north.



Photo 2: View of the east side of the subject property facing northwest.





Photo 3: View of the northwest exterior portion of the subject property facing north.

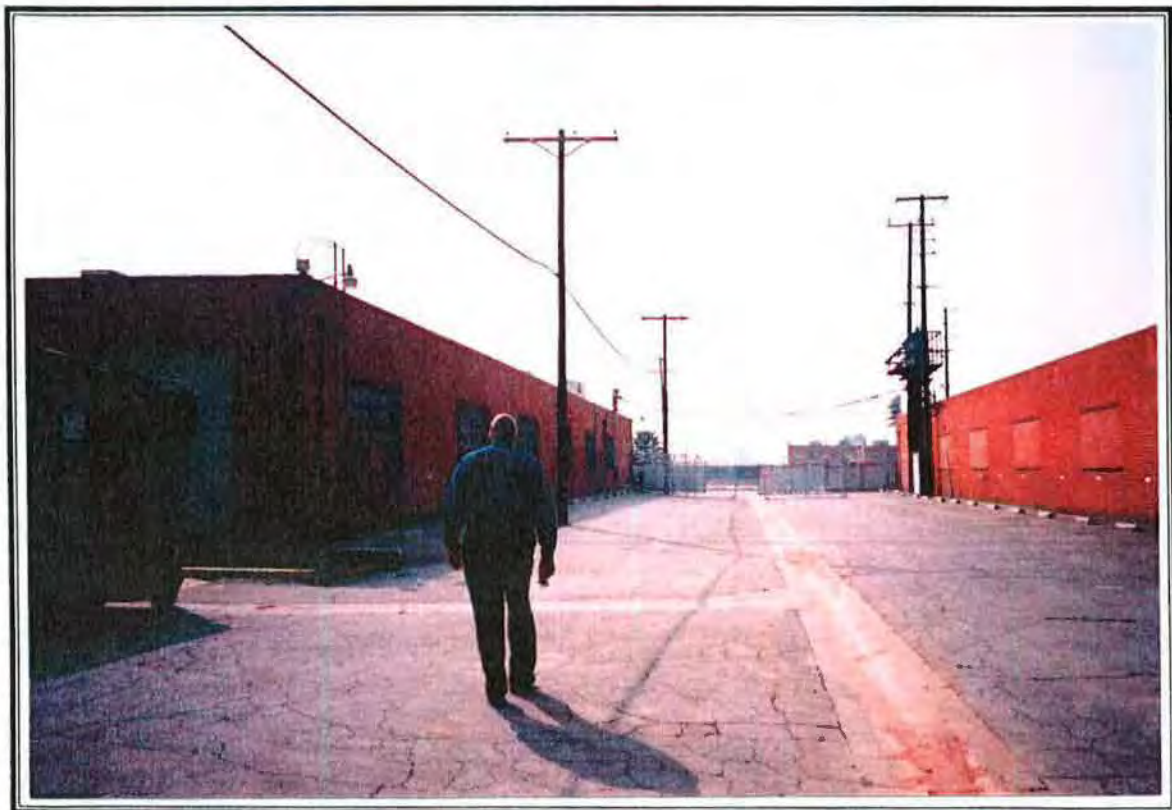


Photo 4: View of the southwest portion of the subject property facing south.





Photo 5: View of west side of building interior facing south.



Photo 6: View of east side of building interior facing south.

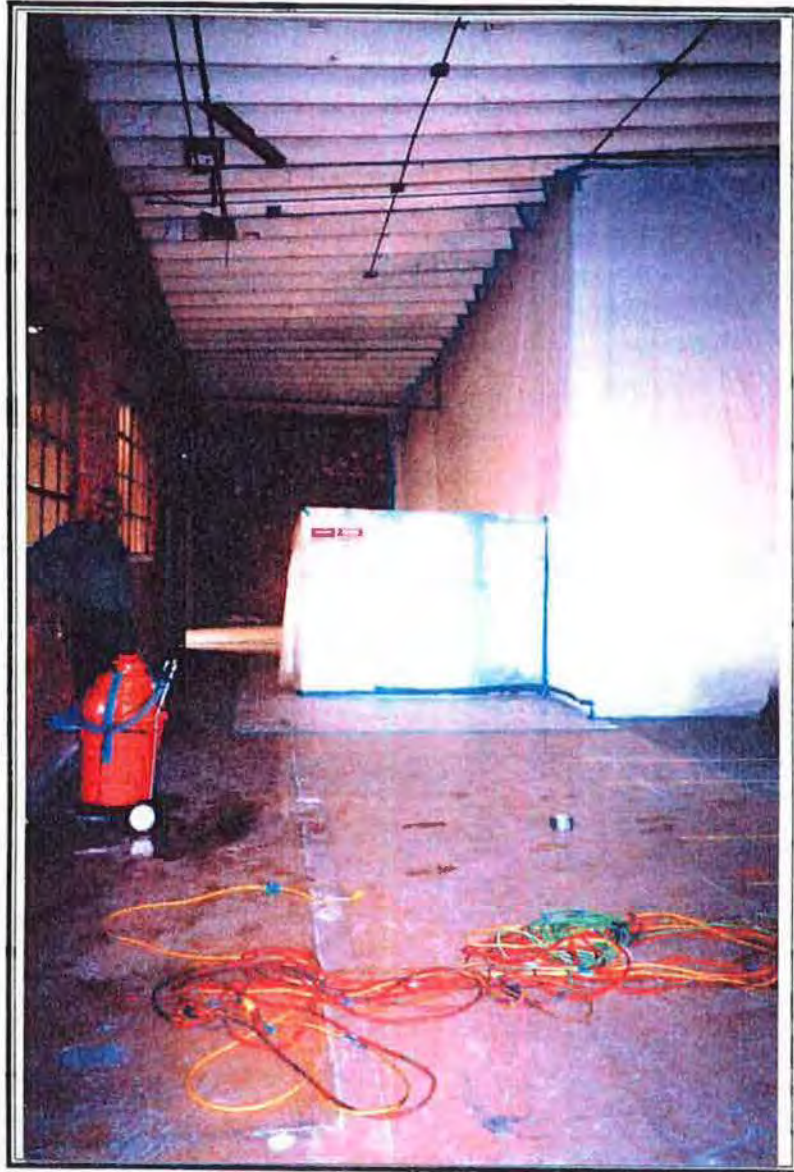


Photo 7: View of north end of building interior facing east.





Photo 8: View of northeast former "shop" area facing north.



Photo 9: View of north portion of former "shop" area facing west.





Photo 10: View of north portion of former "shop" area facing east.



Photo 11: View of storm drain in loading dock at northwest corner of building.





Photo 12: View of former dumpster enclosure along north property boundary.



Photo 13: View of former propane tank pad along north property boundary.





Photo 14: View of waste oil drums and underground hydraulic lift in northeast corner of subject property.

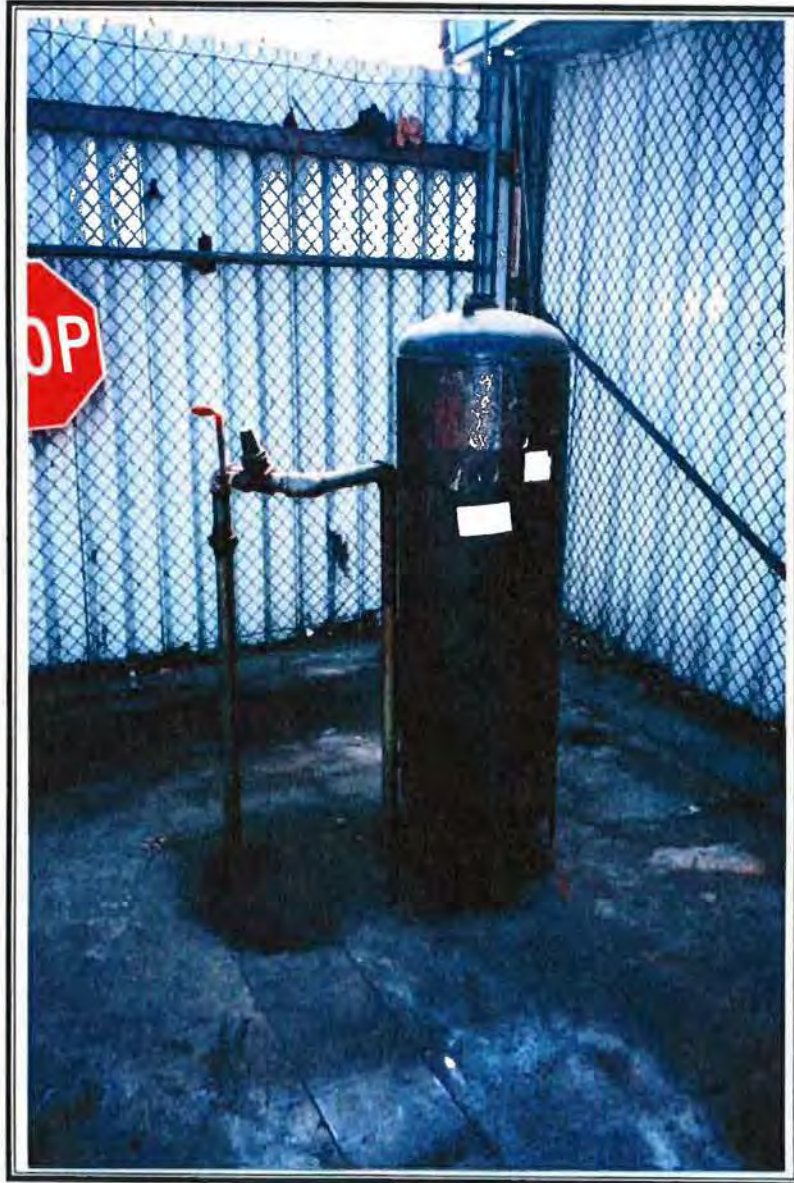


Photo 15: View of hydraulic fluid reservoir in northeast corner of the subject property.





Photo 16: View of asbestos waste dumpster near northwest corner of building.

**ATTACHMENT D**

**CONTRACT**

**ENVIRONMENTAL WORK ORDER ("EWO")**

Sears hereby requests Consultant perform the following Services in accordance with the terms and conditions of that certain Environmental Services Agreement dated September 13, 2001, entered into by Consultant and Sears and incorporated herein by reference.

Date: February 12, 2002

Sears Location (unit number, address): Former Product Services, Sears Unit #8248,  
11961 Sherman Road, North Hollywood, California

General Description of Services: Site Walk Through of vacant former Product Services  
facility.

Scope of Work and Specifications:

Completion Date: Site visit February 28-March 1, with verbal results by March 5 (if applicable).

Lump Sum Cost (including all permit, tax and license fees): \_\_\_\_\_ (if applicable).


Not to Exceed Cost (including all permit, tax and license fees): \_\_\_\_\_ (if applicable).

Invoicing: Invoices for any amounts due Consultant under this EWO shall be forwarded to Sears at the following address:

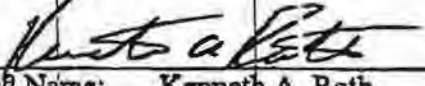
Sears, Roebuck and Co.  
3333 Beverly Road, A2-239B  
Hoffman Estates, IL 60179

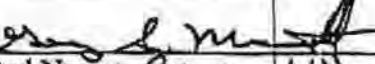
The parties have executed this Environmental Work Order on this 13<sup>th</sup> day of February 2002

**SEARS, ROEBUCK AND CO.**  
a New York corporation

By:   
Printed Name: Teresa A. Kee  
Title: Manager, Environmental Services  
Real Estate / Facilities

**ENSR Corporation**  
a Delaware corporation

By:   
Printed Name: Kenneth A. Roth  
Title: Project Manager

By:   
Printed Name: Grace Alden  
Title: Dept. Manager - EM



AL, Florence  
(256) 767-1210

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AK, Fairbanks  
(907) 452-5700

CA, Alameda  
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CA, Camarillo  
(805) 388-3775

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(818) 546-2090

CA, Irvine  
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CA, Sacramento  
(916) 362-7100

CA, Santa Ana  
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CO, Ft. Collins  
(970) 493-8878

Ft. Collins Tox Lab  
(970) 416-0916

CT, Stamford  
(203) 323-6620

CT, Willington  
(860) 429-5323

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(561) 743-6757

FL, St. Petersburg  
(727) 898-9591

FL, Tallahassee  
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GA, Norcross  
(770) 381-1836

GA, Savannah  
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IL, Chicago  
(630) 836-1700

ME, Portland  
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MD, Columbia  
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NJ, Piscataway  
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NY, Albany  
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NY, Metro Area  
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NY, Rochester  
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NC, Charlotte  
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NC, Raleigh  
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OH, Cincinnati  
(513) 985-9186  
(513) 772-7800

OR, Portland  
(503) 224-7338

PA, Langhorne  
(215) 757-4900

PA, Pittsburgh  
(412) 261-2910

SC, Columbia  
(803) 216-0003

TX, Austin  
(512) 336-2425

TX, Dallas  
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TX, Houston  
(713) 520-9900

TX, San Antonio  
(210) 590-8393

WA, Redmond  
(425) 881-7700

WI, Milwaukee  
(262) 523-2040

#### International Locations

World Headquarters  
USA, Massachusetts  
(978) 589-3232

Azerbaijan  
Bolivia  
Brazil  
Canada  
China, Hong Kong  
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Ireland  
Italy  
Malaysia  
Mexico  
Philippines  
Turkey  
United Kingdom  
Venezuela

For fast action or information, **[www.ensr.com](http://www.ensr.com)**

## **N. HOLLYWOOD, CALIFORNIA**

### **UNIT #8248- PRODUCT SERVICE**

#### **TABLE OF CONTENTS**

1. Lease dated June 21, 1961 between Simha Lainer and Sara Lainer and Sigmund Loew and Regina Loew ("Landlord") and Sears, Roebuck & Co. ("Tenant").
2. Parking Lot Lease dated April 3, 1962 between Simha Lainer and Sara Lainer and Ligmund Loew and Regina Loew ("Landlord") and Sears, Roebuck & Co. ("Tenant").
3. Land Lease dated August 22, 1964 between H. Schnakenberg ("Lessor") and Simha Lainer and Sigmund Loew ("Lessee").
4. Voided Sublease dated March 19, 1965 between Simha Lainer and Sara Lainer and Ligmund Loew and Regina Loew ("Landlord") and Sears, Roebuck & Co. ("Tenant").
5. First Agreement Supplementing Lease dated December 14, 1965 between Simha Lainer and Sara Lainer and Sigmund Loew and Regina Loew ("Landlord") and Sears, Roebuck & Co. ("Tenant").
6. Second Agreement Supplementing Lease dated June 16, 1970 between Simha Lainer and Sara Lainer and ("Landlord") and Sears, Roebuck & Co. ("Tenant").
7. Third Agreement Supplementing Lease dated July 20, 1971 between Simha Lainer and Sara Lainer and ("Landlord") and Sears, Roebuck & Co. ("Tenant").
8. Fourth Agreement Supplementing Lease dated May 5, 1976 between Simha Lainer and Sara Lainer and ("Landlord") and Sears, Roebuck & Co. ("Tenant").
9. Fifth Amendment Supplementing Lease dated May 27, 1981 between Lanier Enterprises, ("Landlord") and Sears, Roebuck & Co. ("Tenant").
10. Sixth Amendment Supplementing Lease dated November 4, 1985 between Lanier Enterprises, ("Landlord") and Sears, Roebuck & Co. ("Tenant").
11. Lease Modification and Extension Agreement dated May 17, 1996 from Sears to Landlord.
12. Lease Modification and Extension Agreement dated May 28, 1997 from Sears to Landlord.
13. Lease Modification and Extension Agreement dated June 30, 1998 from Sears to Landlord.

14. Lease Modification and Extension Agreement dated June 22, 1999 from Sears to Landlord.

15. Lease Modification and Extension Agreement dated August 22, 2000 from Sears to Landlord.

16. Notice of Termination of Lease dated February 20, 2002 from Sears to Landlord.



SUPPLY FANS											MOTORS				FILTERS		CHILLED WATER COILS (EQUIVALENT TRANS. CO. TYPE "R")										STEAM HEATING COILS																
UNIT NO.	FAN LOCATION	AREA SERVED	MANUFACTURER & SIZE	TYPE	DRIVE	C.F.M.	STATIC PRESSURE (IN. W.G.)	OUTLET VELOCITY (F.P.M.)	FAN R.P.M.	TIP SPEED (F.P.M.)	B.H.P.	MOTOR H.P.	MOTOR R.P.M.	VOLTAGE	Φ	CYCLE	NO. REQ'D	FACE WIDTH	FACE LENGTH	ROWS OF TUBES	TOTAL FACE AREA (SQ. FT.)	FACE VELOCITY (F.P.M.)	AIR TEMP. ENTERG. (°F.)	AIR TEMP. LVG. (°F.)	WATER TEMP. ENT. (°F.)	WATER TEMP. LVG. (°F.)	CHILLED WATER (G.P.M.)	NO. REQ'D	TRANS. TYPE & SERIES NO.	FACE WIDTH	FACE LENGTH	TOTAL FACE AREA (SQ. FT.)	FACE VELOCITY (F.P.M.)	STEAM (LB./HR.)	AIR TEMP. ENT. (°F.)	AIR TEMP. LVG. (°F.)	C.F.M.	UNIT NO.					
S-1	ROOF MACH. ROOM	OFFICE & SNACK BAR	AMERICAN BLOWER HS 360	SISW-THD	"V-BELT"	26,850	2 1/4	1955	801	7550	15.55	20	1750	440	3	60	10	88	1	2	33 in.	114 in.	6	52.2	515	84.5	67	60	55.8	46	54	229	1	66 2 ROW	21 in.	114 in.	35.63	750	1365	50	96	26,850	S-1
S-2	ROOF MACH. ROOM	FIRST FLOOR CORRIDOR	AMERICAN BLOWER HS 555	SISW-UBD	"V-BELT"	39,000	2 1/4	1885	469	7300	20.46	25	1150	440	3	60	11	104	1	3	33 in.	114 in.	6	78.3	497	84.5	67	60	55.75	46	54	334	3	66 1 ROW	33 in.	114 in.	78.3	497	1300	50	80	39,000	S-2
S-3	ROOF MACH. ROOM	FIRST FLOOR NORTH SALES	AMERICAN BLOWER HS 537	SISW-UBD	"V-BELT"	34,400	2 1/4	2025	533	7500	18.51	25	1150	440	3	60	10	104	1	3	33 in.	102 in.	6	70.1	496	84.5	67	60	55.8	46	54	294	3	66 1 ROW	33 in.	102 in.	70.1	496	1160	50	80	34,400	S-3
S-4	ROOF MACH. ROOM	SECOND FLOOR SALES	AMERICAN BLOWER HS 657	SISW-UBD	"V-BELT"	46,000	2 1/4	1825	423	7300	24.9	30	1150	440	3	60	11	118	1	4	33 in.	102 in.	6	93.5	493	84.5	67	60	55.8	46	54	392	4	66 1 ROW	33 in.	102 in.	93.5	493	1570	50	80	46,000	S-4
S-5	RECEIVING & SHIPPING	SCALE & ROOM	AMERICAN BLOWER "UTILITY SET" 105 A2	SISW-RHD	"V-BELT"	1,000	3/8	1596	721	1985	—	1/6	1750	120	1	60																										S-5	

EXHAUST FANS												MOTORS				
UNIT NO	FAN LOCATION	AREA SERVED	MANUFACTURER & SIZE	TYPE	DRIVE	C.F.M.	STATIC PRESSURE (in. W.G.)	OUTLET VELOCITY (F.P.M.)	FAN R.P.M.	TIP SPEED (F.P.M.)	B.H.P.	MOTOR H.P.	MOTOR R.P.M.	VOLTAGE	φ	CYCLE
E-1	ROOF	SOUTH TOILETS	DAVIDSON N819	ROOF	"V-BELT"	1425	3/8	—	928	3975	.114	1/6	1750	120	1	60
E-2	ROOF	CENTRAL TOILETS	DAVIDSON N819	ROOF	"V-BELT"	1575	3/8	—	1085	4650	.188	1/4	1750	120	1	60
E-3	ROOF	TEL. EQUIP. ROOM	AMERICAN BLOWER "UTILITY SET" 90AZ	SISW-THD	"V-BELT"	500	1/4	1100	640	1510	—	1/6	1725	120	1	60
E-4	ROOF	NORTH TOILETS	AMERICAN BLOWER "UTILITY SET" 90AZ	SISW-THD	"V-BELT"	600	3/8	1300	785	1850	—	1/6	1725	120	1	60
E-5	ROOF	SNACKBAR	DAVIDSON N828	ROOF	"V-BELT"	3500	5/8	—	722	4650	.422	1/2	1750	440	3	60
E-6	ROOF	LIGHTING DISPLAY & STOCK AREA	DAVIDSON N862	ROOF	"V-BELT"	21,150	1/2	—	325	4650	2.05	3	1750	440	3	60
E-7																
E-8	WEST WALL, CENTER OF FIRST FLOOR	TAILOR SHOP	AMERICAN BLOWER "UTILITY 165-CZ	SISW-BHD	"V-BELT"	2,340	1/4	1500	409	1760	—	1/3	1750	120	1	60
E-9	PENTHOUSE ROOF	ROOF MACH. ROOM	DAVIDSON N850	ROOF	"V-BELT"	16,400	1/8	—	407	4650	1.10	2	1750	440	3	60
E-10																
E-11	FIRST FLOOR NORTH, OVER SHOW WINDOW N86	POPCORN STAND	AMERICAN BLOWER "UTILITY SET" 90AZ	SISW-BHD	"V-BELT"	517	1/4	1100	640	1510	—	1/6	1750	120	1	60

CENTRIFUGAL REFRIGERATION COMPRESSORS								
NO. REQ'D	CAPACITY (TONS)	SUCTION TEMP. (°F)	DISCHARGE TEMP. (°F)	B.H.P.	R.P.M.	MOTOR H.P.	MOTOR R.P.M.	CURRENT CHARACTERISTICS
1	416 1/2	34.7	98.6	398	5300	400	1200	440-3- 60

REFRIGERANT CONDENSERS					WATER COOLERS				
NO. REQ'D	G.P.M.	WATER TEMP. ENT. (°F.)	WATER TEMP. LVG. (°F.)	PRESS. DROP (FT. H <sub>2</sub> O)	NO. REQ'D	CAPACITY (TONS)	G.P.M.	NO. PASSES	PRESS. DROP (FT. H <sub>2</sub> O)
1	1300	80	90	20.8	2	416 1/2	1249	2	17.6

COOLING TOWER (EQUIVALENT PRITCHARD & CO. MODEL N81B2 BQR 18)										
NO. REQ'D	ENT. AIR (W.B. °F.)	WATER TEMP. ENT. (°F.)	WATER TEMP. LVG. (°F.)	G.P.M.	C.F.M.	MOTOR				NOMINAL SIZE
1	72	90	80	1300	129,600	15	1750	440	3	60

BOOSTER HEATING COILS										
NO. REQ'D	TRANS. TYPE & SERIES NO.	C.F.M.	FACE WIDTH	FACE LENGTH	FACE AREA (SQ. FT.)	FACE VELOCITY (F.P.M.)	STEAM (LB./HR.)	AIR TEMP. ENT. (°F.)	AIR TEMP. LVG. (°F.)	UNIT NO.
1	66 2 ROW	800	15 in.	18 in.	1.88	430	50	60	115	BH-1
1	66 2 ROW	800	15 in.	18 in.	1.88	430	50	60	115	BH-2
1	66 2 ROW	800	15 in.	18 in.	1.88	430	50	60	115	BH-3
1	66 1 ROW	230	6 in.	12 in.	.5	460	7.5	60	84	BH-4
1	66 1 ROW	300	6 in.	12 in.	.5	600	8.7	60	84	BH-5
1	66 2 ROW	800	15 in.	18 in.	1.88	430	50	60	115	BH-6
1	66 1 ROW	4300	21 in.	42 in.	6.13	700	114	60	81	BH-7
1	66 2 ROW	800	15 in.	18 in.	1.88	430	50	60	115	BH-8
1	66 2 ROW	800	15 in.	18 in.	1.88	430	50	60	115	BH-9

#### LEGEND OF SYMBOLS

T.G.	TOP GRILLE WITH SEPARATE VELOCITROL DAMPER.
T.R.	TOP REGISTER.
B.R.	BOTTOM REGISTER.
C.R.	CEILING REGISTER.
N.	NECK DIAMETER OF CEILING TYPE OUTLET.
T.	THROAT.
TH.	THERMOSTAT.
ST.	SHUT-OFF.
F.D.	APPROVED FIRE DAMPERS.
C.W.	CHILLED WATER PIPING.
C.W.R.	CHILLED WATER RETURN.
S.S.	STEAM SUPPLY.
C.R.	CONDENSATE RETURN.
G.	GAS.
O.	OIL.
O.R.	OIL RETURN.
V.	VENT.
N.D.	NECK DIAMETER OF HALF-ROUND CEILING OUTLET.
C.W.	CONDENSER WATER.
C.W.R.	CONDENSER WATER RETURN.
T.R.V.	TEMPERATURE REGULATING VALVE.

CHILLED WATER PUMPS (EQUIVALENT INGERSOLL-RAND CO. SIZE)										CONDENSER WATER PUMPS (EQUIVALENT INGERSOLL-RAND CO. SIZE)									
NO. REQ'D	TYPE	SIZE	G.P.M.	HEAD (FT.)	PUMP MOTOR					NO. REQ'D	TYPE	SIZE	G.P.M.	HEAD (FT.)	PUMP MOTOR				
2	CENTRIF.	6CFV50	1300	110	50	1750	440	3	60	2	CENTRIF.	6CFV40	1300	80	40	1750	440	3	60

#### GENERAL NOTES

- 1) PROVIDE & INSTALL FIRE DAMPERS OF APPROVED DESIGN & CONSTRUCTION WHERE REQUIRED BY LOCAL ORDINANCE.

ELECTRONIC CONTROL #

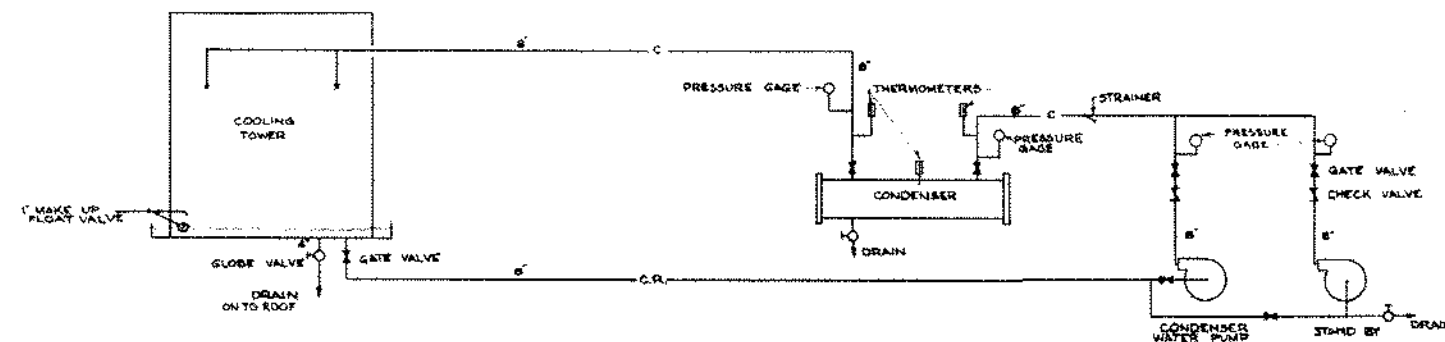
R1168 160 M1

789 RALPH C. P... 1-24-50

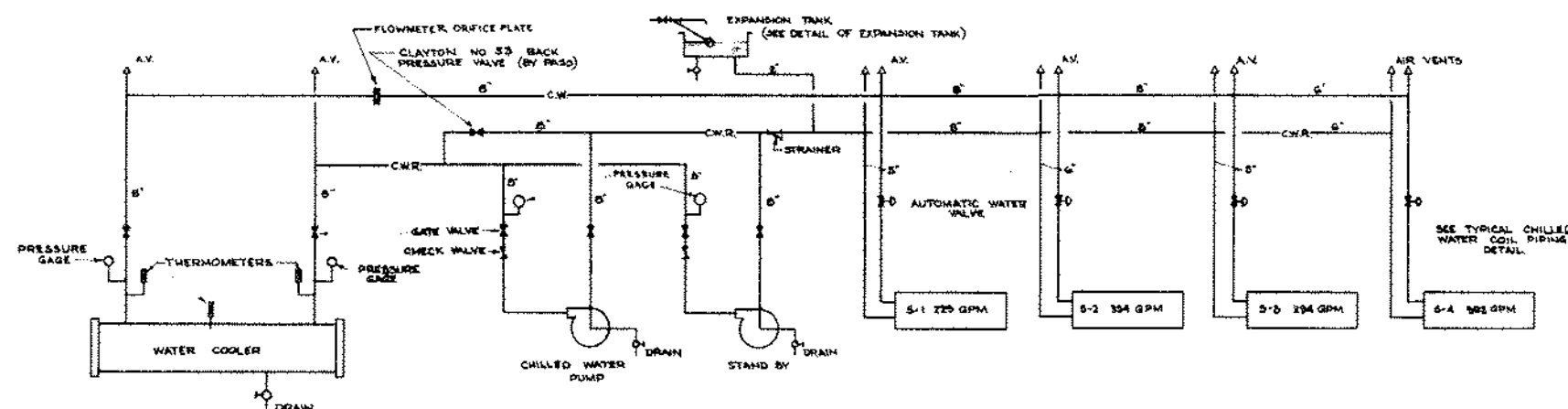
AIR COND. EQUIPMENT SCHEDULES			
NO.	REVISIONS	DATE	

MECHANICAL DRAWINGS			
TRADE	DESIGNED BY	TRADE	DESIGNED BY
AIR COND.		PLUMBING	
ELECTRICAL		STRUCTURAL	
HEATING			
PLUMBING			

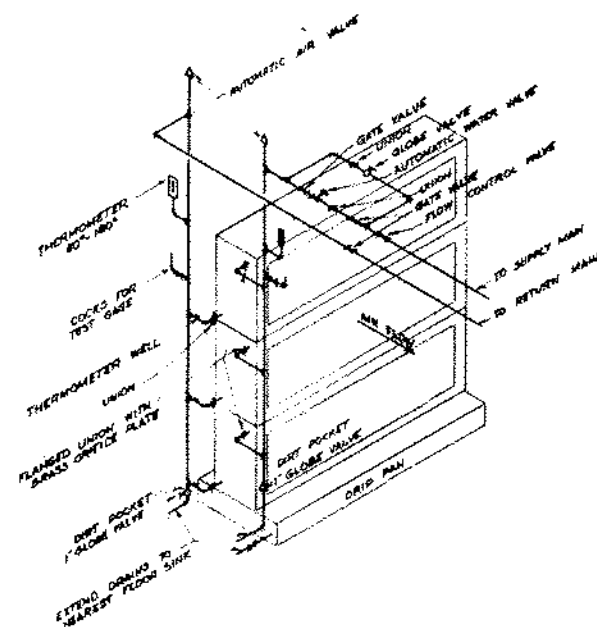
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SEA  
LOS ANG  
STI  
ASSOCIAT  
410 W. 82'



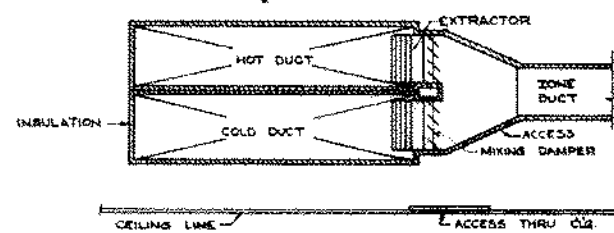
SCHEMATIC CONDENSER WATER PIPING  
NOT TO SCALE



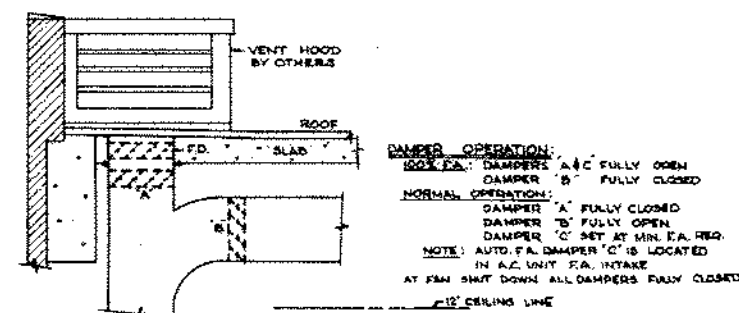
SCHEMATIC CHILLED WATER PIPING  
NOT TO SCALE



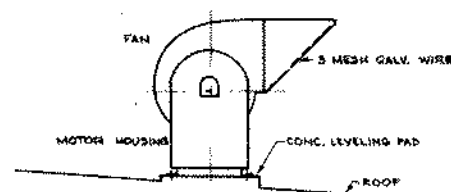
TYPICAL CHILLED WATER PIPING DETAIL  
NOT TO SCALE



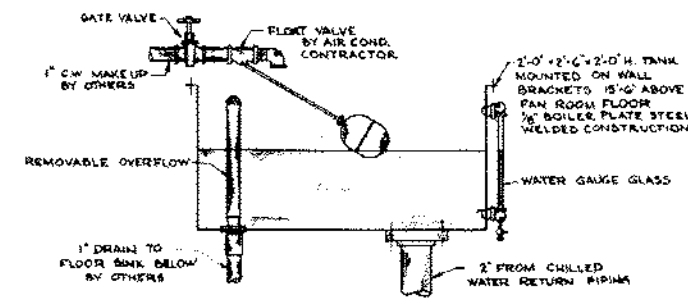
TYPICAL DOUBLE DUCT DETAIL  
SCALE: 1/4"=1'-0"



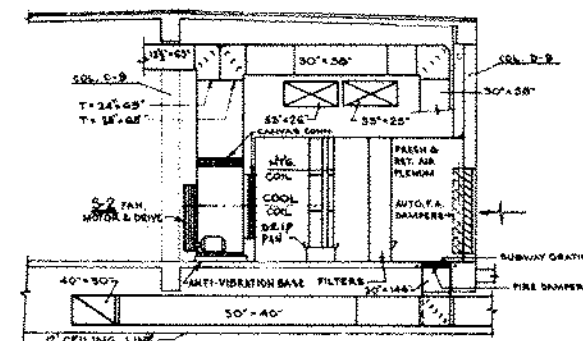
TYPICAL PRESSURE RELIEF ARRANGEMENT  
SCALE: 1/4"=1'-0"



TYPICAL UTILITY ROOF FAN  
NOT TO SCALE

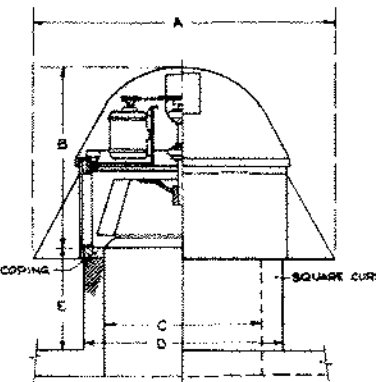


DETAIL OF EXPANSION TANK FOR  
CHILLED WATER SYSTEM  
NOT TO SCALE

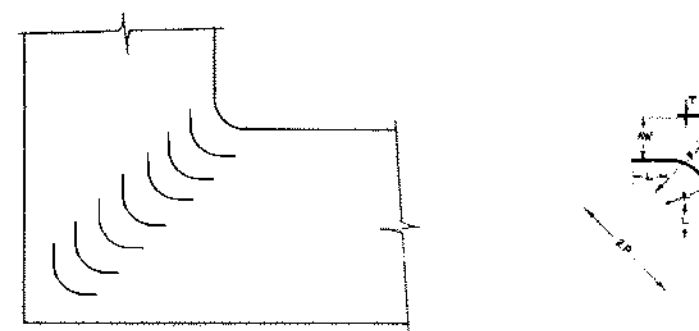


SECTION D-D  
SCALE: 1/4"=1'-0"

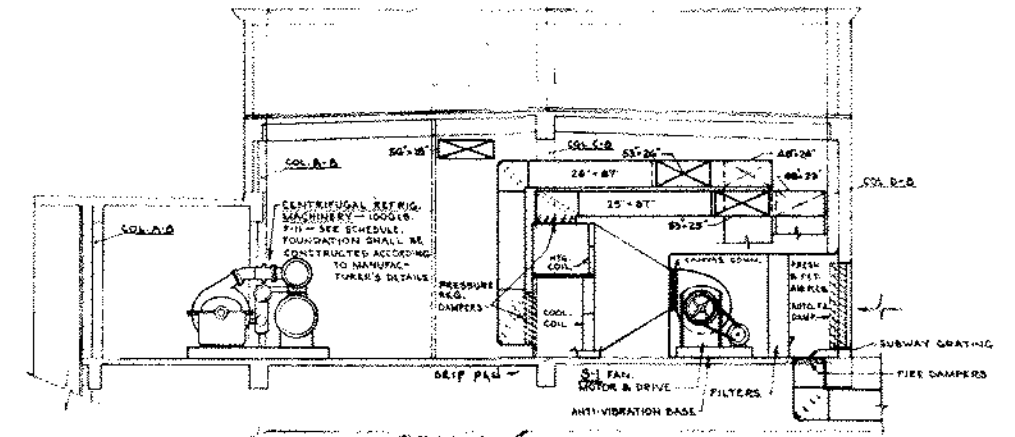
FAN SIZE	WT.	A	B	C	D	E
18	350	32"	32"	18"	18"	10"
24	400	36"	36"	20"	20"	10"
30	500	42"	42"	24"	24"	10"
36	600	48"	48"	28"	28"	10"



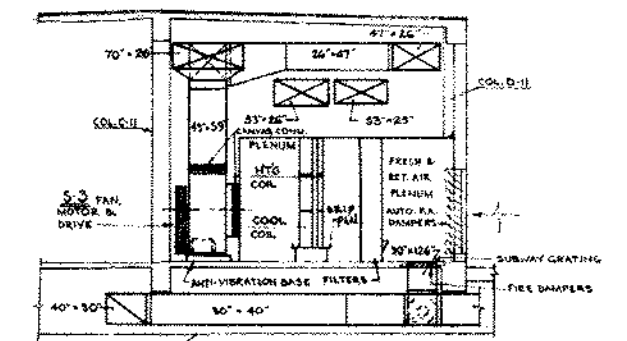
TYPICAL ROOF TYPE FAN  
NOT TO SCALE



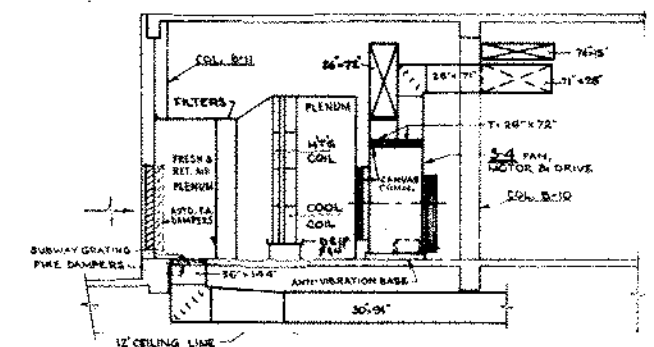
DETAIL OF DUCT TURNS FOR SQ. ELBOWS  
NO SCALE



SECTION E-E  
SCALE: 1/4"=1'-0"



SECTION F-F  
SCALE: 1/4"=1'-0"



SECTION G-G  
SCALE: 1/4"=1'-0"

ELECTRONIC CONTROL #  
R1168 16A M10

AIR CONDITIONING DETAILS

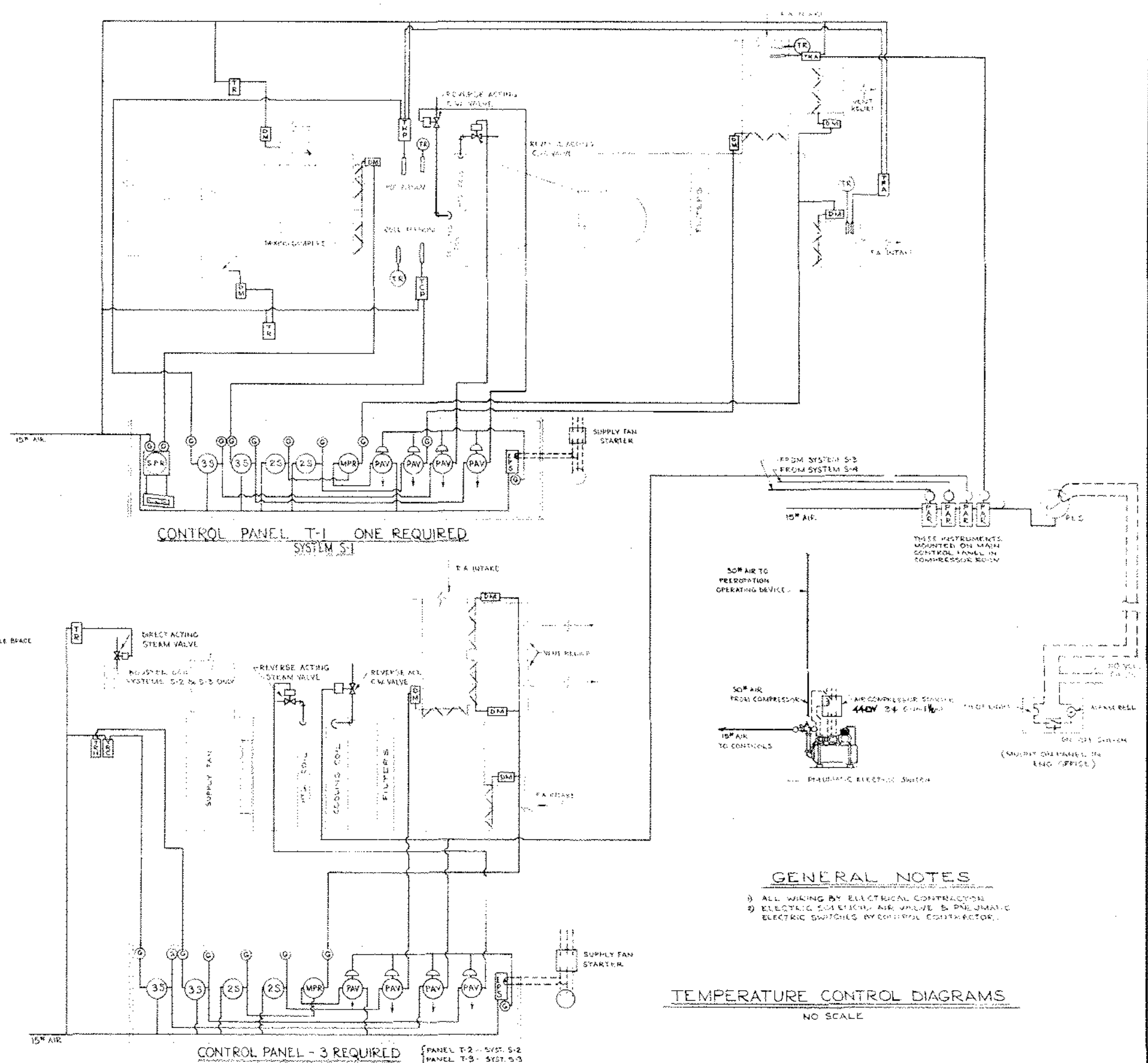
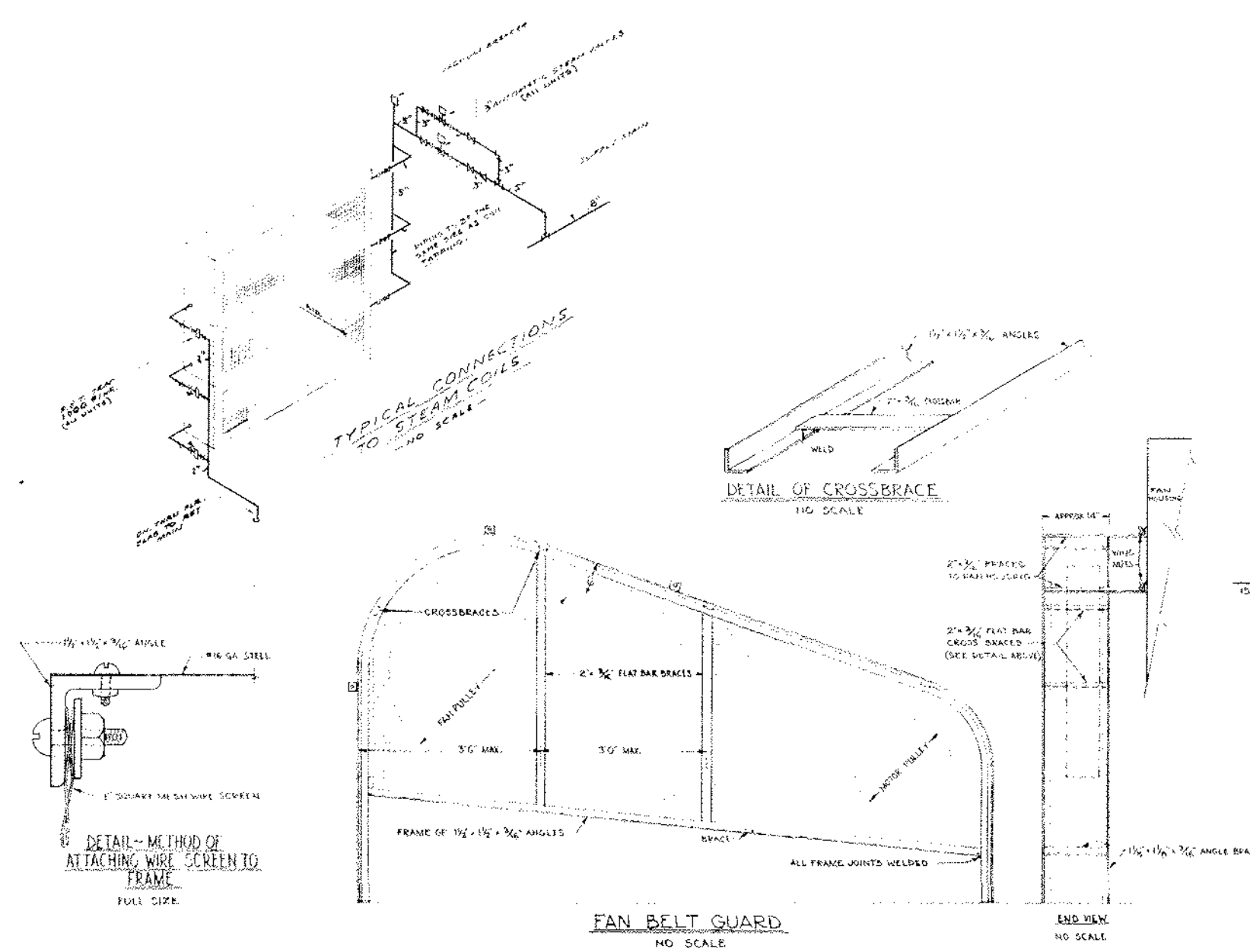
DATE	REVISION	COMPLETED	DATE
1-24-50			

TRADE	DESIGNED BY	TRADE	DESIGNED BY
MECHANICAL	SPRINGER	MECHANICAL	SPRINGER
ELECTRICAL	SPRINGER	ELECTRICAL	SPRINGER
PLUMBING	SPRINGER	PLUMBING	SPRINGER

RETAIL STORE BUILDING  
FOR  
SEARS ROEBUCK AND CO.  
LOS ANGELES  
CALIF.  
STILES CLEMENTS  
ASSOCIATE ARCHITECTS & ENGINEERS  
210 W. SEVENTH ST. LOS ANGELES 14, CALIF.

JOB NO. 789  
RALPH E. PHILLIPS  
MECHANICAL & ELECTRICAL ENGINEER  
600 ST. PAUL AVENUE  
LOS ANGELES 14, CALIFORNIA  
DATE 1-24-50





- LEGEND OF SYMBOLS**
- HEATING ROOM THERMOSTAT
  - COOLING ROOM THERMOSTAT
  - FRESH AIR REMOTE BULB THERMOSTAT
  - RETURN AIR REMOTE BULB THERMOSTAT
  - HOT PLENUM REMOTE BULB THERMOSTAT
  - COLD PLENUM REMOTE BULB THERMOSTAT
  - POSITIVE ACTING RELAY
  - ELECTRIC SOLENOID AIR VALVE
  - ROOM THERMOSTAT
  - DAMPEN MOTOR
  - STATIC PRESSURE REGULATOR
  - THREE POSITION SWITCH
  - TWO POSITION SWITCH
  - 3-WAY AIR VALVE
  - MINIMUM PRESSURE RELAY
  - POSITIVE ACTING RELAY
  - RELAY

**GENERAL NOTES**

- ALL WIRING BY ELECTRICAL CONTRACTOR
- ELECTRIC SOLENOID AIR VALVE & PNEUMATIC ELECTRIC SWITCHES BY CONTROL CONTRACTOR

ELECTRONIC CONTROL #  
R1168 170 M11

**AIR CONDITIONING DETAILS**

NO.	REVISIONS	DATE
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

TRADE	DESIGNED BY	TRADE	DESIGNED BY
AIR COND.		SPRINKLER	
ELECTRICAL		STRUCTURAL	
HEATING		VENTILATION	
PLUMBING			

MECHANICAL DRAWINGS

RETAIL STORE BUILDING  
FOR  
SEARS ROEBUCK AND CO.  
LOS ANGELES CALIF.

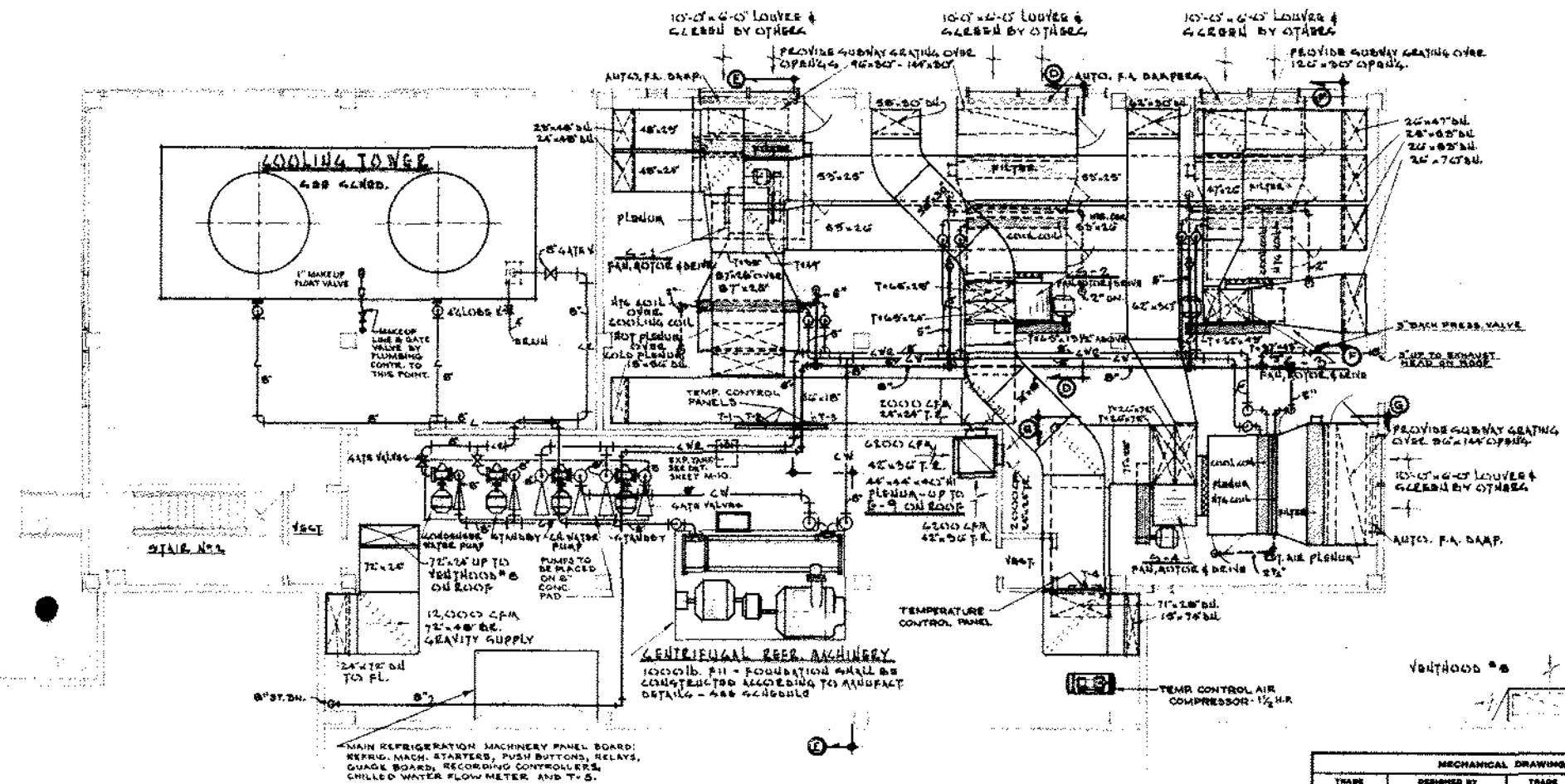
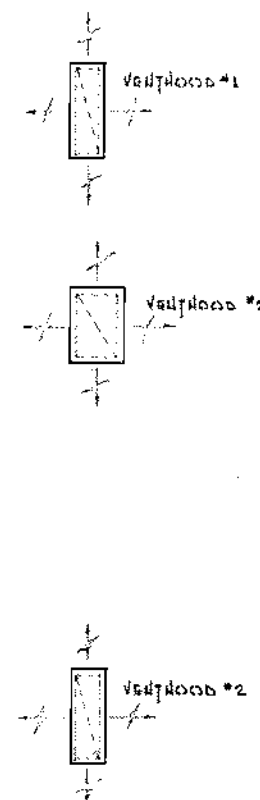
STILES CLEMENTS  
ASSOCIATED ARCHITECTS & ENGINEERS  
410 W. SEVENTH ST. LOS ANGELES 12, CALIF.

JOB # 2350  
SHEET NO. M-11  
OF 11 SHEETS

789 1-24-50

ROOF TYPE RAU  
454 DETAIL 4887 & 4646D.

NOTE - VENTHOODS BY OTHERS.  
SEE DETAIL SHEET FOR CONN.  
TO VENTHOOD.



NOTE: 1) ALL HEATING COILS TO HAVE TWO  
2) ALL TRAPS TO BE F.A.T. 1000 LBS./HR.  
3) DRI TRAPS TO BE F.A.T. 200 LBS./HR.



ROOF PLAN - SOUTH HALF

ELECTRONIC CONTROL

JOB  
No. 769  
RALPH E. PHILLIPS  
MECHANICAL & ELECTRICAL ENGINEER  
800 ST. PAUL AVENUE  
LOS ANGELES 14, CALIFORNIA

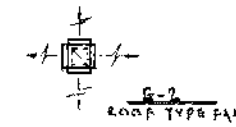
DATE 11-10-55  
1-24-50  
M6

MECHANICAL DRAWINGS			
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AIR COND.		SPRINKLER	
ELECTRICAL		STRUCTURAL	
HEATING		VENTILATION	
PLUMBING			

RETAIL STORE BUILDING  
FOR  
SEARS ROEBUCK AND CO.  
LOS ANGELES CALIF.  
STILES CLEMENTS  
ASSOCIATED ARCHITECTS & ENGINEERS  
810 W. SEVENTH ST. LOS ANGELES 14, CALIF.

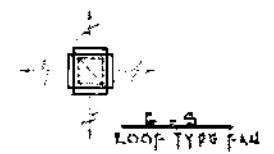
NO 2350  
M-6

Vent Hood #7



UTILITY SET WITH WEATHERPROOF  
ROOF HANGING, SEE SCHEDULE

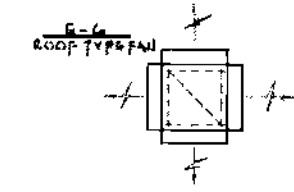
VE-4  
UTILITY SET WITH WEATHERPROOF  
ROOF HANGING, SEE SCHEDULE



STACK  
VENT ON TO ROOF  
VENT ON TO ROOF

ROOF GARDEN

NOTES  
1) VENT HOODS BY OTHERS - SEE DETAIL  
SHEET FOR CONNECTION TO VENT HOODS.  
2) FOR DETAILS ROOF TYPE FAN SEE SCHEDULE  
4 DETAIL SHEET.



MECHANICAL DRAWINGS			
TRADE	DESIGNED BY	TRADE	DESIGNED BY
AIR COND.		PLUMBING	
ELECTRICAL		STRUCTURAL	
HEATING		VENTILATION	

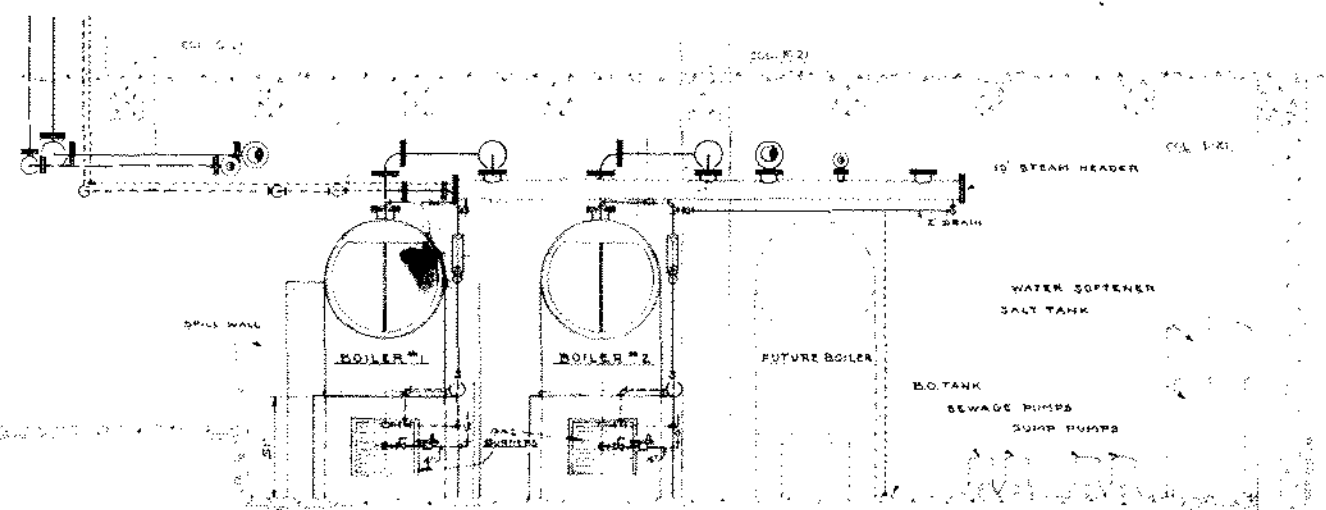
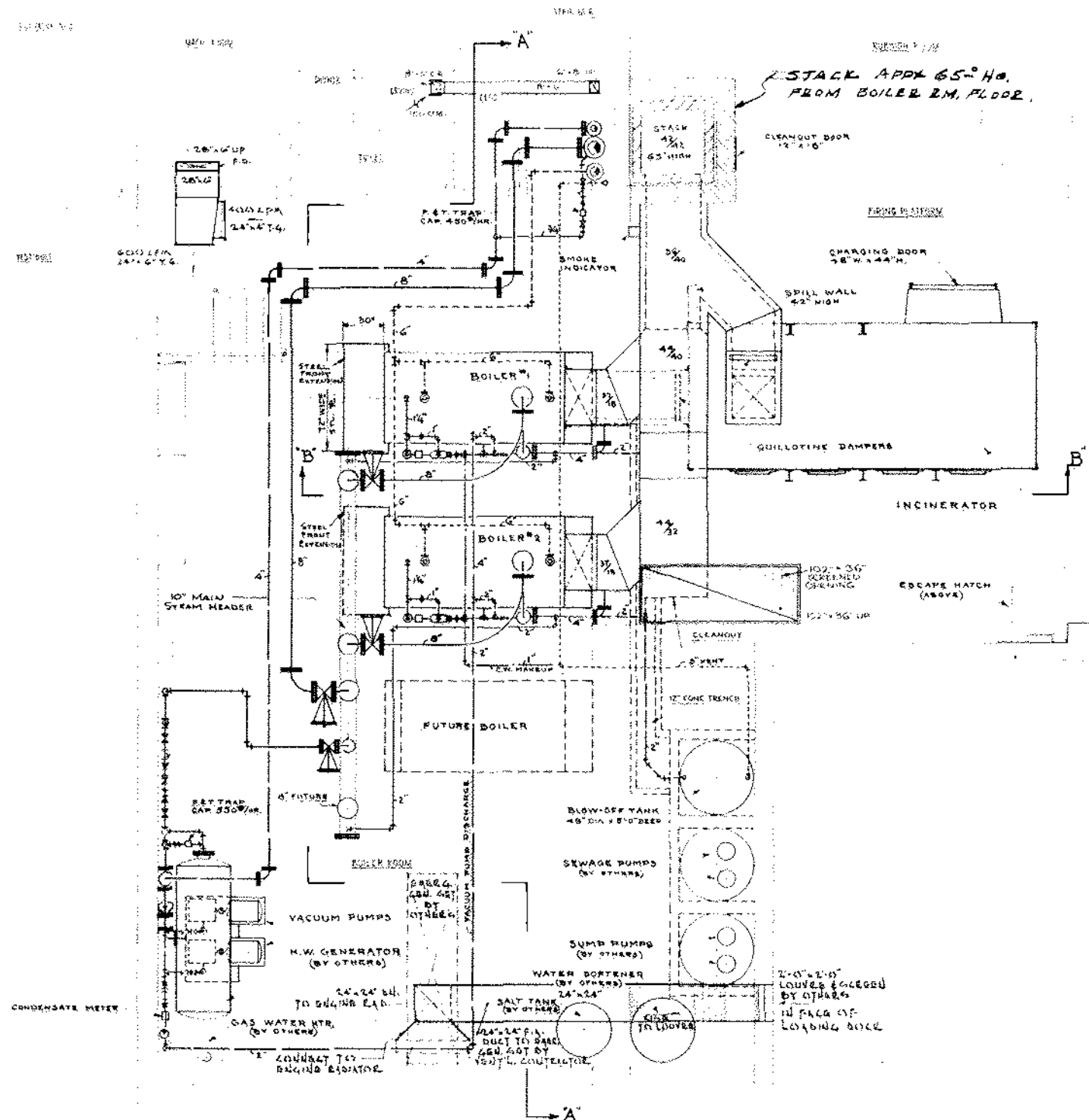
ROOF PLAN-NORTH HALF			
DRAWN BY	REVIEWED	COMPLETED	DATE

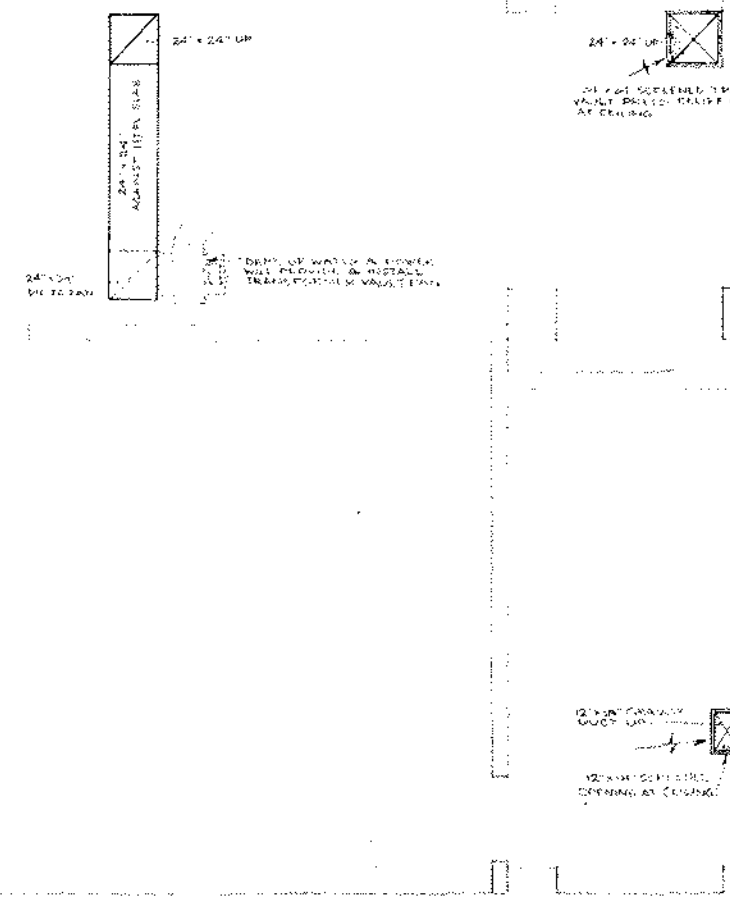
ELECTRONIC CONTROL #	
JOB NO. 789	RALPH E. PHILLIPS MECHANICAL & ELECTRICAL ENGINEER 600 ST. PAUL AVENUE LOS ANGELES 14, CALIFORNIA

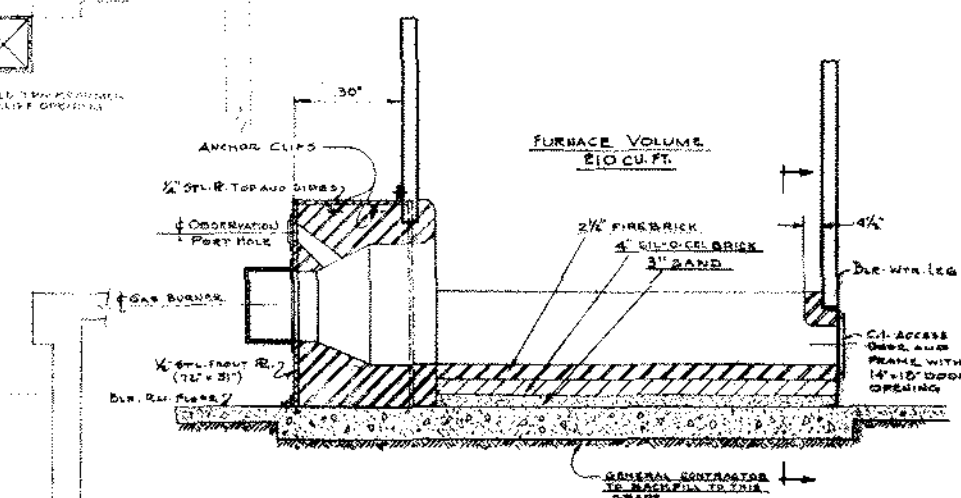
RETAIL STORE BUILDING FOR SEARS ROEBUCK AND CO. LOS ANGELES CALIF.	
STILES CLEMENTS ASSOCIATED ARCHITECTS & ENGINEERS 210 W. SEVENTH ST. LOS ANGELES 4, CALIF.	JOB 2350 M-7



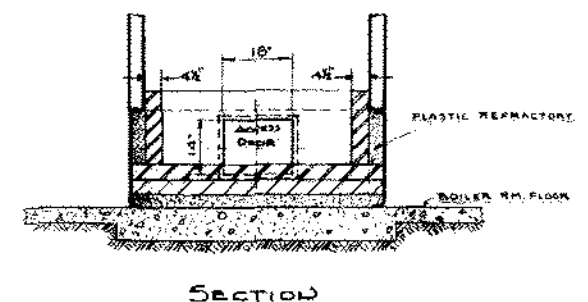
SECTIONAL ELEVATION-AA  
SCALE 1/4" = 1'-0"



SECTION BB  
SCALE 1/4" = 1'-0"



SECTION AT & BOILER  
SCALE 1/2" = 1'-0"



DETAIL OF BOILER SETTING  
SCALE 1/2" = 1'-0"

DUPLIX VACUUM PUMP						
LOCATION	MFR.	MFR'S NO.	KWH. RASH	H.P.	MOTORS	ELECT.
BOILER RM. CHICAGO	CONDOR-VAC	20,000		3	1720	480V, 30.00"

BOILER SCHEDULE						
LOCATION	NO. REQD.	TYPE	MFR.	MFR'S NO.	NET RATING	FUEL
BOILER RM.	2	HIGH LES	BROWNELL	5-713	15/80 EDR	NAT. GAS

GAS BURNER SCHEDULE						
LOCATION	NO. REQD.	MFR.	MFR'S NO.	FUEL	GAS MAX. MIN. PRESS. MAX. MIN. TEMP.	ADDL. DATA
BOILER RM.	2	CONDOR-VAC	A18-7	NAT. GAS	4730/1200 F. L. IN. 15/100	

ELECTRONIC CONTROL #  
R1168 1167 MB

BOILER ROOM PLAN AND DETAILS

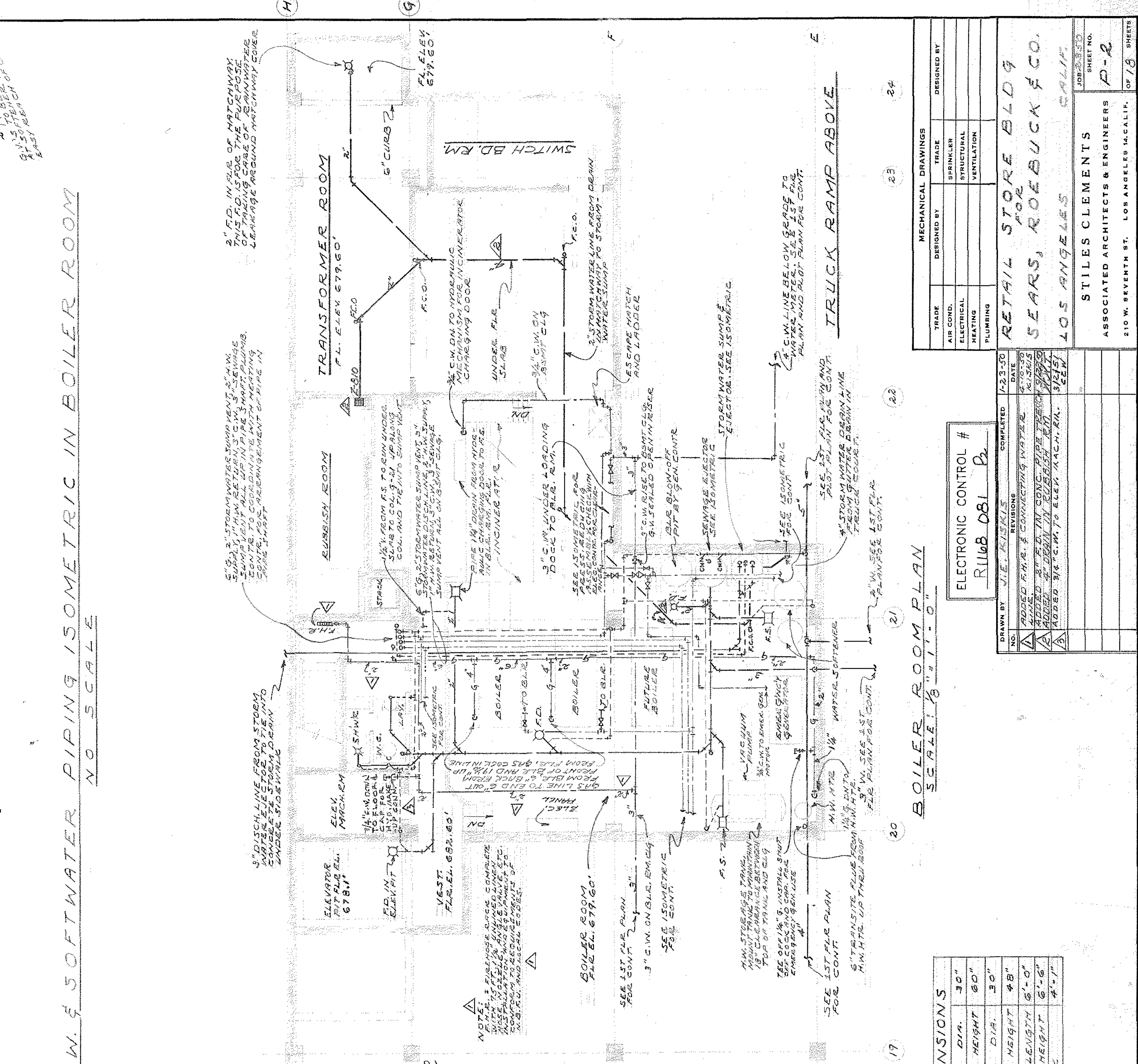
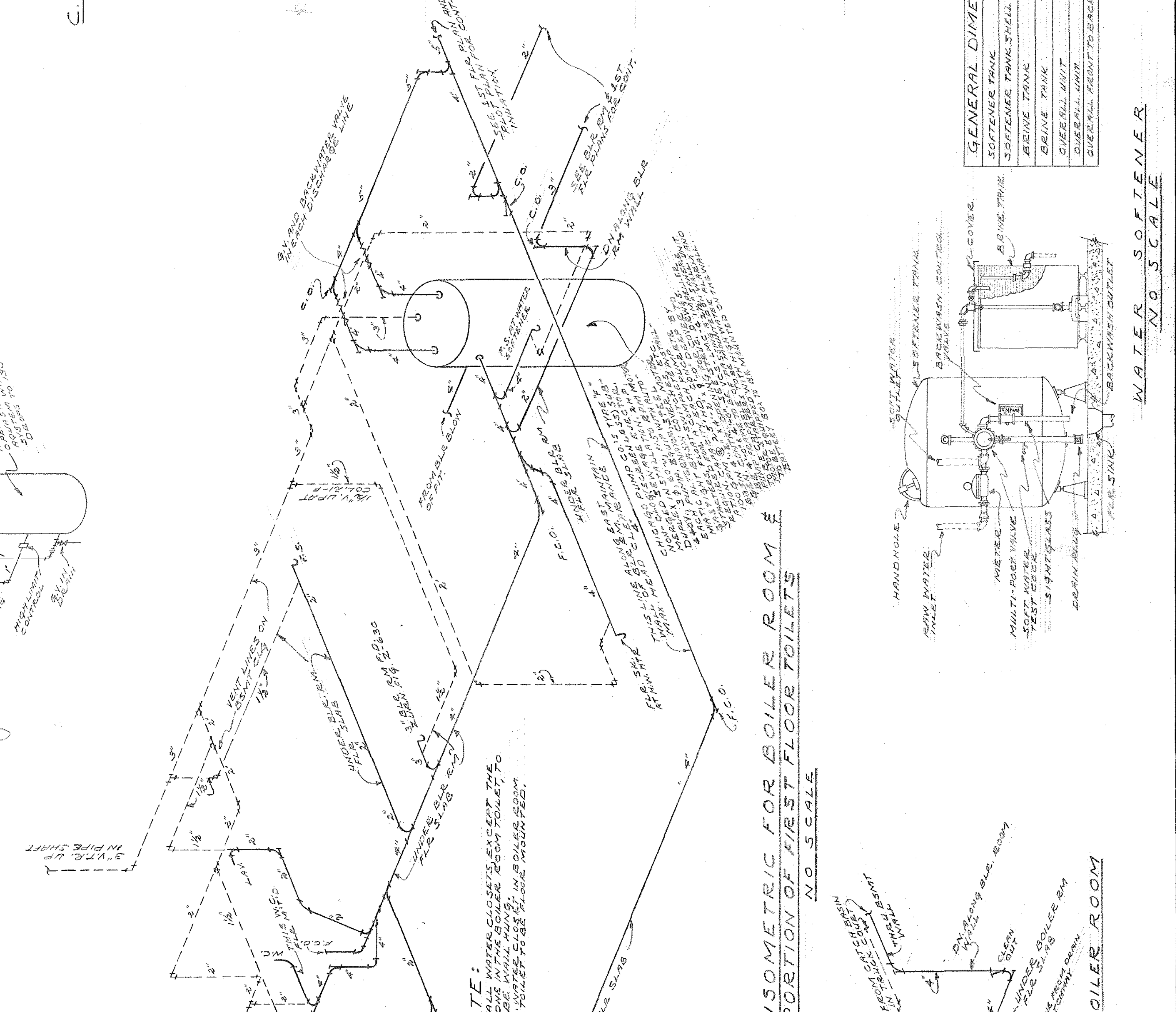
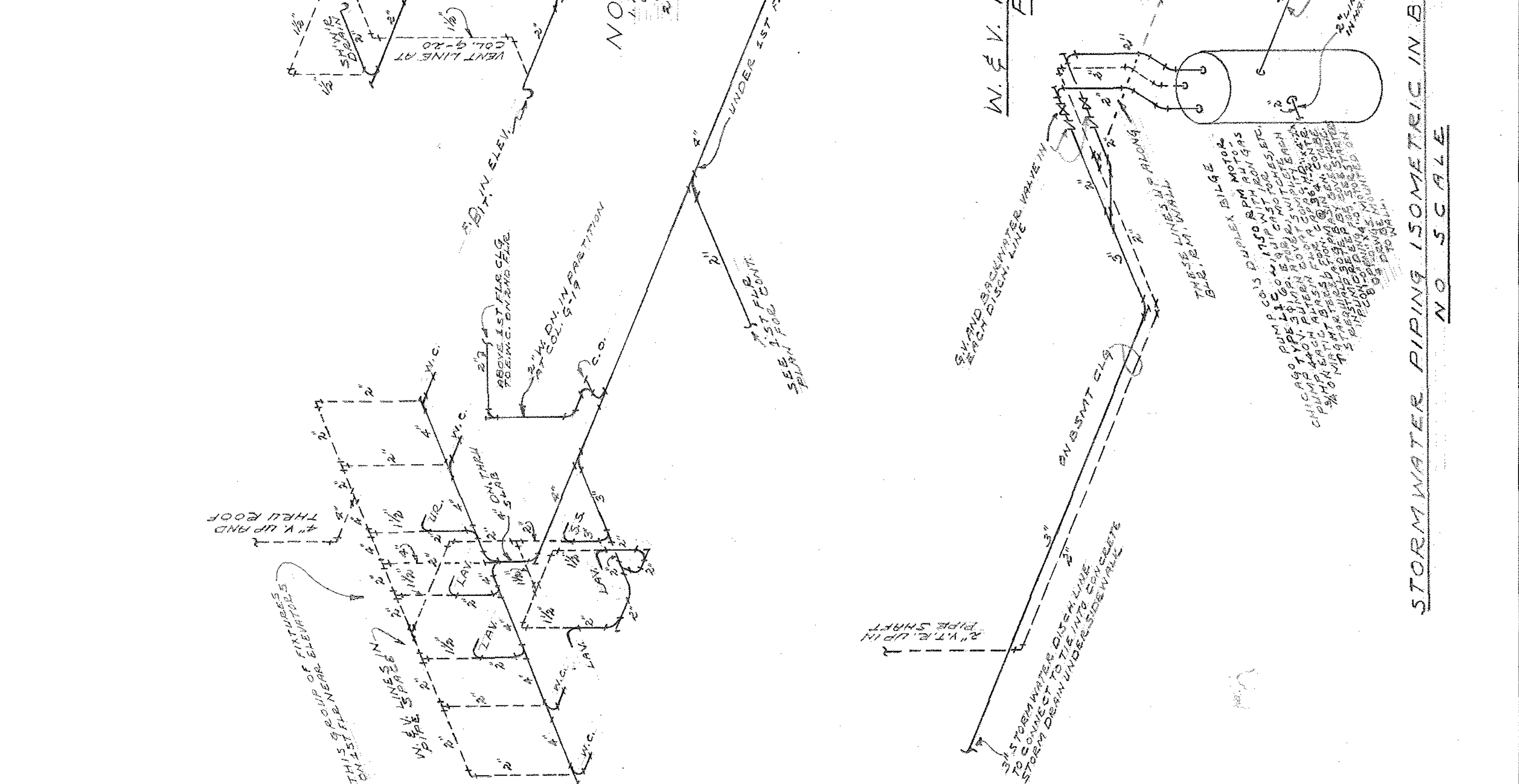
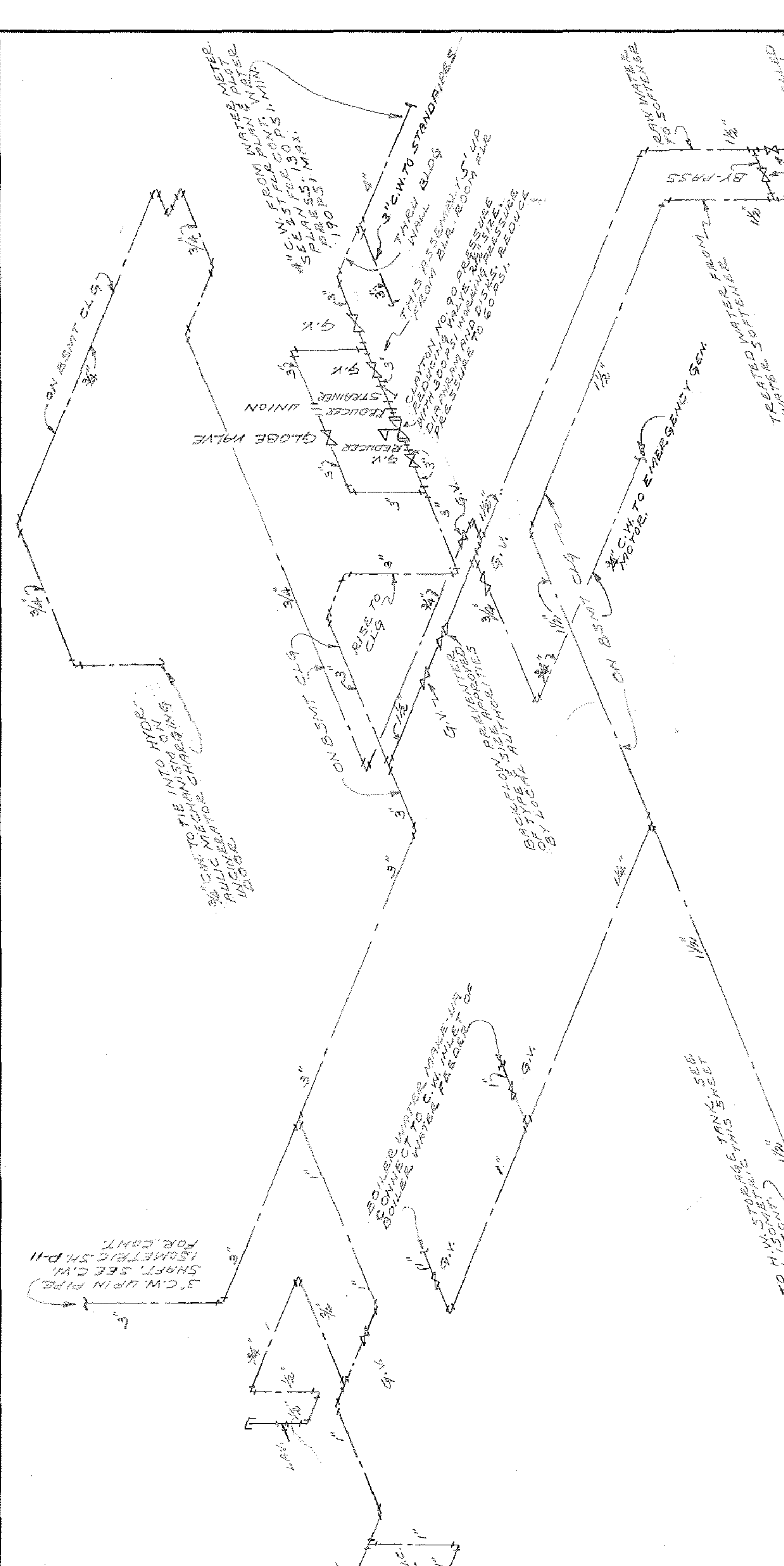
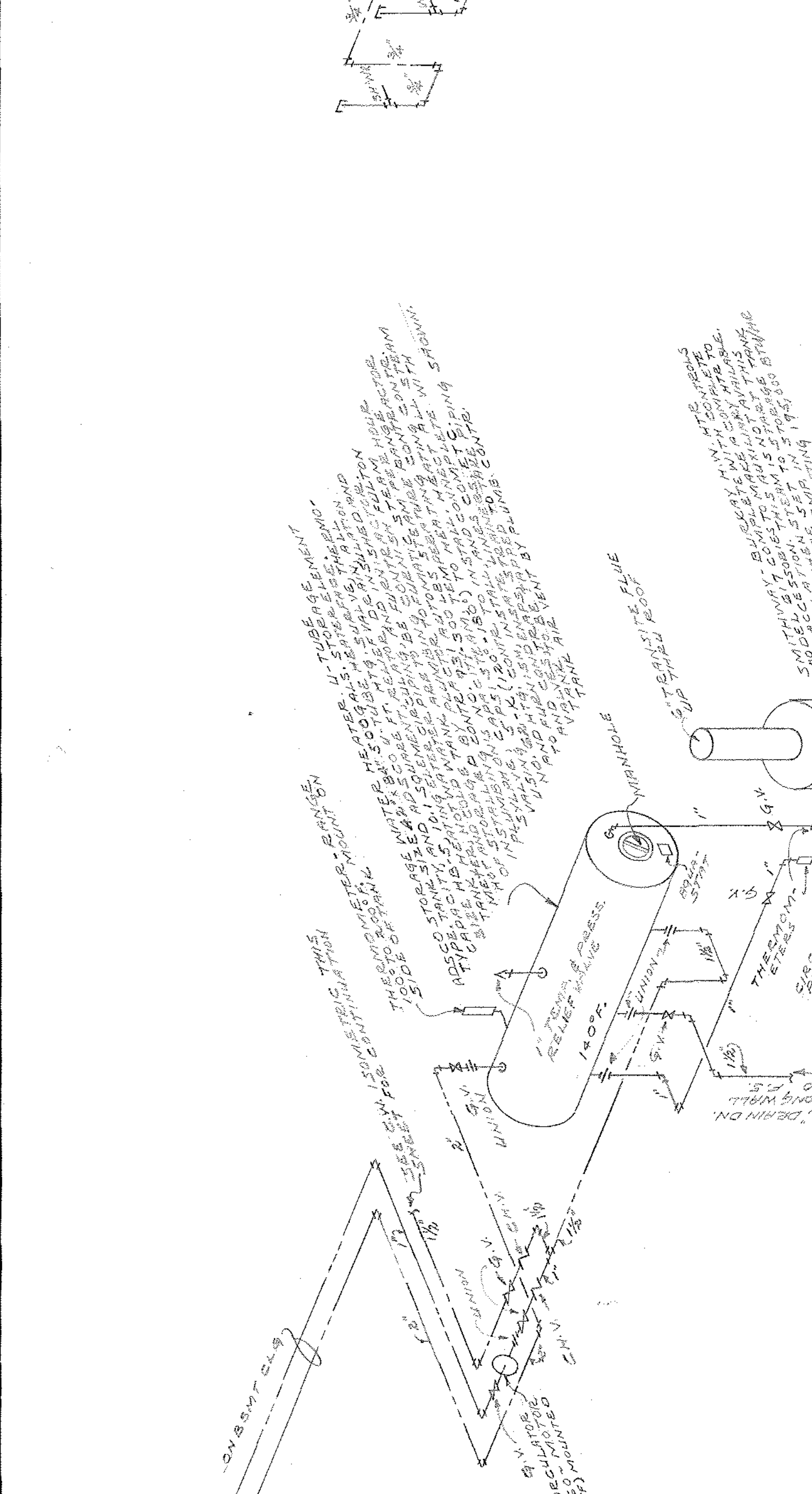
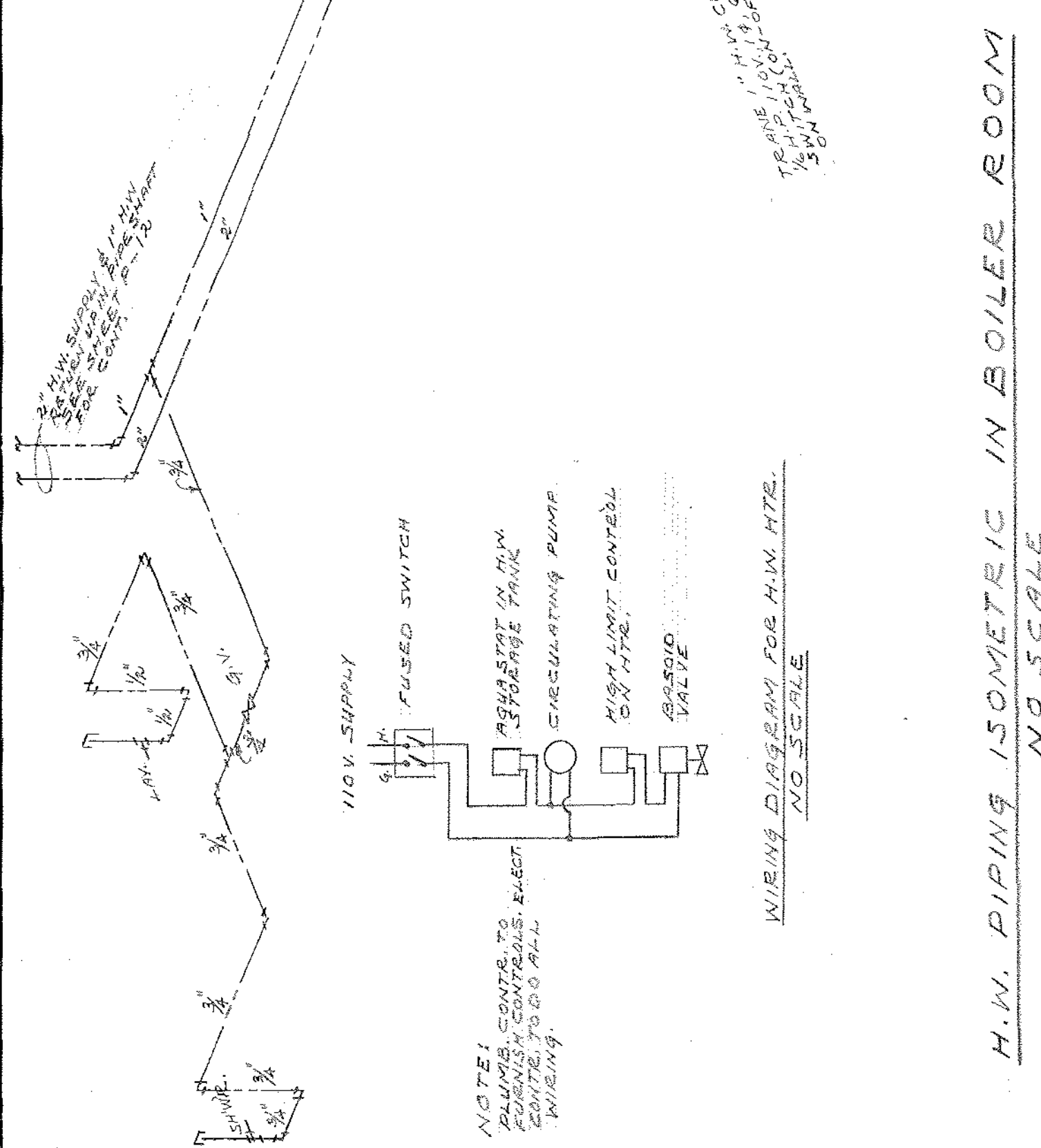
NO.	REVISIONS	DATE

TRADE	DESIGNED BY	TRADE	DESIGNED BY
AIR COND.		SPRINKLER	
ELECTRICAL		STRUCTURAL	
HEATING		VENTILATION	
PLUMBING			

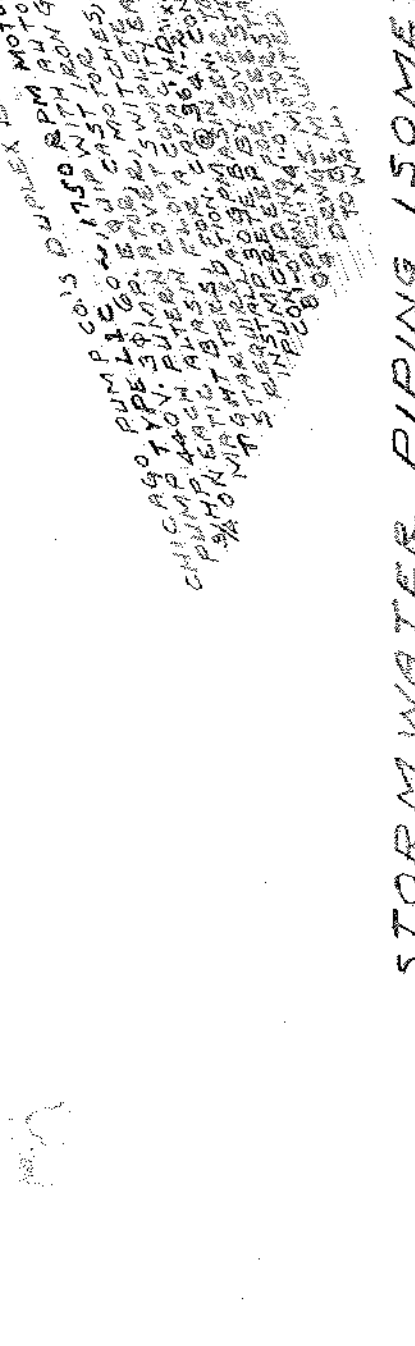
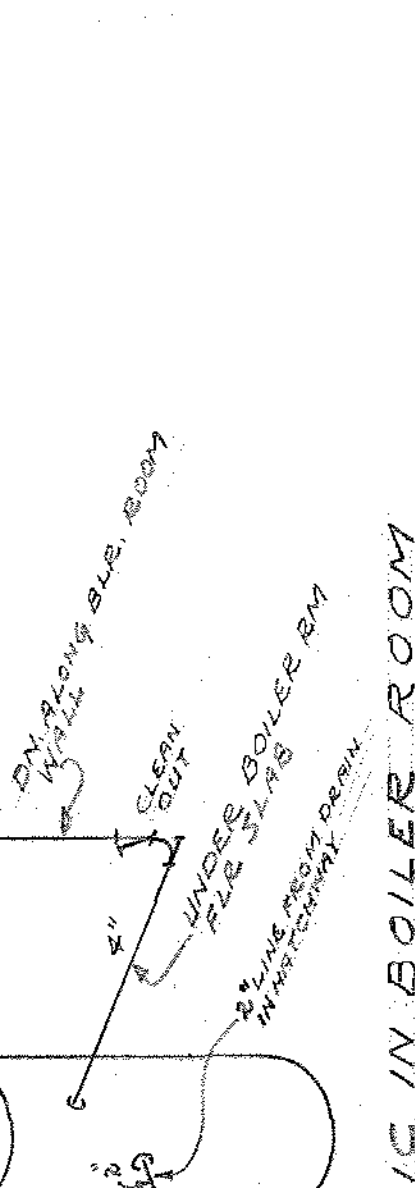
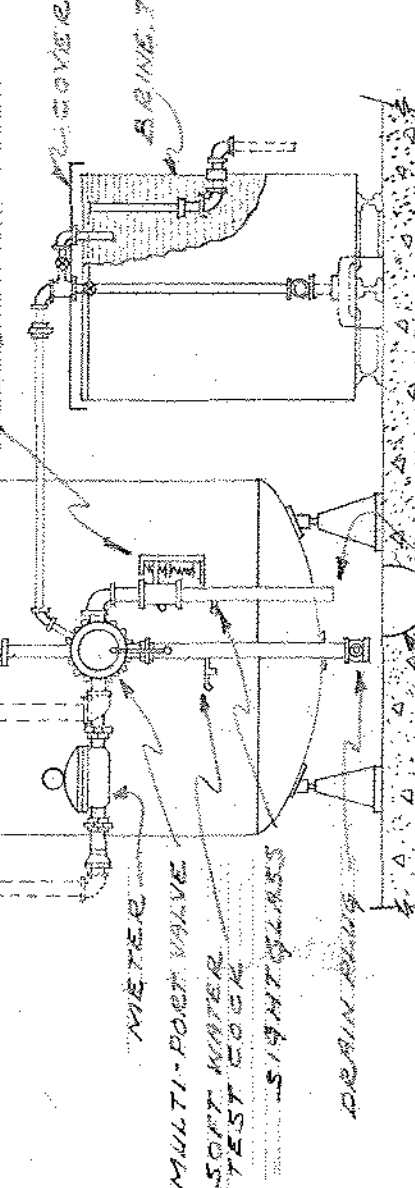
RETAIL STORE BUILDING  
FOR  
SEARS ROEBUCK & CO.  
LOS ANGELES  
STILES CLEMENTS  
ASSOCIATED ARCHITECTS & ENGINEERS  
410 W. SEVENTH ST. LOS ANGELES 10, CALIF.

JUN 23 1955  
M-8  
OF 11 SHEETS





GENERAL DIMENSIONS			
SOFTENER TANK	DIA.	30"	
SOFTENER TANK	HEIGHT	60"	
BRINE TANK	DIA.	30"	
BRINE TANK	HEIGHT	48"	
CYBERALL UNIT	LENGTH	6'-0"	
CYBERALL UNIT	HEIGHT	6'-0"	
CYBERALL UNIT	WIDTH	6'-0"	



MECHANICAL DRAWINGS			
DATE	DESIGNED BY	TRACE	DESIGNED BY
DATE	DESIGNED BY	TRACE	DESIGNED BY
DATE	DESIGNED BY	TRACE	DESIGNED BY
DATE	DESIGNED BY	TRACE	DESIGNED BY

ELECTRONIC CONTROL #			
DATE	DESIGNED BY	TRACE	DESIGNED BY
DATE	DESIGNED BY	TRACE	DESIGNED BY
DATE	DESIGNED BY	TRACE	DESIGNED BY
DATE	DESIGNED BY	TRACE	DESIGNED BY

STILES CLEMENTS			
DATE	DESIGNED BY	TRACE	DESIGNED BY
DATE	DESIGNED BY	TRACE	DESIGNED BY
DATE	DESIGNED BY	TRACE	DESIGNED BY
DATE	DESIGNED BY	TRACE	DESIGNED BY

RETAIL STORE BLDG			
DATE	DESIGNED BY	TRACE	DESIGNED BY
DATE	DESIGNED BY	TRACE	DESIGNED BY
DATE	DESIGNED BY	TRACE	DESIGNED BY
DATE	DESIGNED BY	TRACE	DESIGNED BY

STILES CLEMENTS			
DATE	DESIGNED BY	TRACE	DESIGNED BY
DATE	DESIGNED BY	TRACE	DESIGNED BY
DATE	DESIGNED BY	TRACE	DESIGNED BY
DATE	DESIGNED BY	TRACE	DESIGNED BY



# MATERIAL SAFETY DATA SHEET

**CT-531**

PRODUCT NAME: CT-531

PAGE NUMBER: 1 OF 4

MSDS NUMBER: 032206CT531

PRODUCT CODE: Cooling Water Treatment

EMERGENCY PHONE #'S: 800-255-3924 (CHEMTEL)

MSDS DATE: 03/22/2006

**Advanced Chemical Technology, Inc.**

8728 Utica Avenue, Rancho Cucamonga, CA 91730 USA

Phone (800) 527-9607 / Fax (909) 980-9366

Web: <http://www.actglobal.net> Email: [act@actglobal.net](mailto:act@actglobal.net)**HEALTH****0** Slightly Hazardous**FLAMMABILITY****0** Will Not Burn**REACTIVITY****0** Stable**Personal Protection****B****1. IDENTIFICATION**

Chemical Name: CT-531

Chemical Family: Cooling Water Treatment

DOT Information: NON REGULATED

**2. PHYSICAL DATA**

Appearance: Pale Yellow liquid

Odor Characteristics: Bland

pH: 6.75

Viscosity: ND

Specific Gravity (Water = 1): 1.075

Vapor Density (Air = 1): 0.62 @ 68F

Vapor Pressure: 23.756 mm Hg

Boiling Point: 212 F

Freezing Point: ND

Evaporation Rate (Water = 1): 1

Solubility in Water: Miscible

**3. INGREDIENTS - HAZARDOUS**

Components	CAS No.	OSHA PEL	ACGIH TLV	Approx %
Hydroxyethylidene diphosphonic acid	2809-21-4	NE	NE	<10
Benzotriazole	95-14-7	NE	NE	<4

**4. FIRE AND EXPLOSION HAZARD DATA**

Flash Point: NA

Flammable Limits in Air % by volume: Lower NA Upper NA

Extinguishing Media: Water spray, foam, carbon dioxide, dry chemical

Special Fire Fighting Procedures: None

Unusual Fire &amp; Explosion Hazards: None

**5. HEALTH HAZARD DATA****Effects of Overexposure:**

Inhalation: Not a route of exposure

Skin Contact: May cause irritation or redness on contact with skin

Eye Contact: Causes irritation of eyes

Ingestion: Swallowing large quantities causes headaches, nausea, vomiting, stomach cramps, and diarrhea

Delayed Effects: None

Medical Conditions Aggravated by

Exposure: None

**Advanced Chemical Technology, Inc.**

8728 Utica Avenue, Rancho Cucamonga, CA 91730 USA

Phone (800) 527-9607 / Fax (909) 980-9366

Web: <http://www.actglobal.net> Email: [act@actglobal.net](mailto:act@actglobal.net)

MATERIAL SAFETY DATA SHEET PAGE #: 2 OF 4

PRODUCT NAME: CT-531

MSDS NUMBER: 032206CT531

MSDS DATE: 03/22/2006

PRODUCT CODE: Cooling water treatment

**6. FIRST AID MEASURES****Inhalation:** If breathing stops, give artificial respiration. Call a physician immediately.**Skin Contact:** Immediately remove clothing under a safety shower. Flush all affected areas with large amounts of water for at least 15 minutes.**Eye Contact:** Immediately flush the eyes with large quantities of running water for a minimum of 15 minutes. Obtain medical attention immediately.**Ingestion:** Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. Give large quantities of water. (If available, give several glasses of milk.) If vomiting occurs spontaneously, keep airway clear and give more water. **GET MEDICAL ATTENTION IMMEDIATELY.****Notes to Physician:** None**7. REACTIVITY DATA****Stability:** Stable**Incompatibility:** Acids, oxidizing materials, halogen compounds, copper, aluminum, and zinc**Hazardous Combustion or Decomposition Products:** Carbon monoxide, carbon dioxide, ammonia, and oxides of nitrogen**Hazardous Polymerization:** Will not occur**Conditions to Avoid:** Do not mix with other industrial chemicals**8. SPILL OR LEAK PROCEDURES****Personal Precautions:** Wear goggles, rubber boots and gloves**Environmental Precautions:** Keep out of sewers, drains, surface waters, and soil**Method for Cleanup:** For small spills mop or wipe up. For large spills, contain by diking with soil or other absorbent material.**9. EXPOSURE CONTROLS / PERSONAL PROTECTION****Respiratory Protection:** None required**Eye Protection:** Safety glasses with side shields recommended**Skin Protection:** Rubber gloves**Other Clothing:** Normal work clothes**Other Equipment:** None**Engineering Controls:** General mechanical ventilation for enclosed areas.



**Advanced Chemical Technology, Inc.**

8728 Utica Avenue, Rancho Cucamonga, CA 91730 USA

Phone (800) 527-9607 / Fax (909) 980-9366

Web: <http://www.actglobal.net> Email: [act@actglobal.net](mailto:act@actglobal.net)

MATERIAL SAFETY DATA SHEET PAGE #: 3 OF 4

PRODUCT NAME: CT-531

MSDS NUMBER: 032206CT531

MSDS DATE: 03/22/2006

PRODUCT CODE: Cooling water treatment

**10. HANDLING AND STORAGE****Storage Precautions:** Keep container closed when not in use. Store in a protected location.**Handling Precautions:** Rinse container before disposal. Have an eye wash station in work area.**11. REGULATORY INFORMATION****RCRA Status**

Not regulated

**CERCLA**

Not regulated

**SARA/Title III – Section 302 Emergency Planning Notification/Threshold Planning Quantities**

This product does not contain a Section 302 substance subject to Emergency Planning Notification/Threshold Planning Quantities

**SARA/Title III – Section 304 Emergency Notification Reporting.**

This product does not contain a Section 304 listed hazardous substance for Emergency Release Notification

**SARA/Title III – Section 311/312 Hazardous Categories**

No hazardous

**SARA/Title III – Section 313 Toxic Chemical Release Reporting**

This product does not contain a Section 313 listed toxic chemical subject to release reporting requirements

**TSCA Inventory Status**

All chemical components are listed on TSCA Inventory.

**California Proposition 65 Status**

This product does not contain chemicals currently on the California list of known carcinogens and/or reproductive toxins

**12. TOXICOLOGICAL INFORMATION****Acute Data:** Product is considered to have a low order of toxicity**Reproductive / Teratology Data** NE**13. ECOLOGICAL INFORMATION****Fate in the Environment:** All components will degrade in 60 days in the presence of sunlight and oxygen**14. DISPOSAL CONDITIONS****Procedures:** Dispose of all waste according to Federal, State, and Local regulations**15. TRANSPORTATION INFORMATION**

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation

US DOT Non-Regulated

## 16. OTHER INFORMATION

	<u>Health</u>	<u>Fire</u>	<u>Reactivity</u>	<u>Specific Hazard</u>
A. Suggested NFPA Rating:	0	0	0	NONE

Health Hazard (Blue)	Fire Hazard (Red)	Reactivity (Yellow)	Specific Hazard (White)
4- Deadly	Flash Points		
3- Extremely Hazardous	4- Below 73 F	4- May detonate	OX Oxidizer
2- Hazardous	3- Below 100F	3- Shock & heat may detonate	ACID Acid
1- Slightly Hazardous	2- Below 200 F	2- Violent chemical change	ALK Alkali
0- Non Hazardous	1- Above 200 F	1- Unstable if heated	COR Corrosive
	0- Will Not Burn	0- Stable	

	Health	Fire	Reactivity	Protective Equipment Guide
B. Suggested HMIS Rating:	0	0	0	B

Health Hazard (Blue)		Fire Hazard (Red)		Reactivity (Yellow)		Protective Equipment Guide (White)	
4-	Extreme: Highly Toxic. May be fatal on short term exposure. Protective equipment required.	4-	Extreme: Extremely flammable gas or liquid. Flash Point below 73 F.	4-	Extreme: Explosive at room temperature.	A-	Safety glasses
						B-	Safety glasses, gloves
						C-	Safety glasses, gloves, protective apron
3-	Serious: Toxic. Avoid inhalation or skin contact.	3-	Serious: Flammable. Flash point 73 F to 100 F.	3-	Serious: May explode if shocked, heated under confinement or mixed with water.	D-	Face shield, gloves, protective apron
						E-	Safety glasses, gloves, dust mask
2-	Moderate: Moderately toxic. May be harmful if inhaled or absorbed.	2-	Moderate: Combustible. Requires moderate heating to ignite. Flash Point 100F to 200F.	2-	Moderate: Unstable, may react with water.	F-	Safety glasses, gloves, protective apron, dust mask
						G-	Safety glasses, gloves, vapor respirator
1-	Slight: Slightly toxic. May cause slight irritation.	1-	Slight: Slightly combustible. Requires strong heating to ignite.	1-	Slight: May react if heated or mixed with water.	H-	Splash goggles, gloves, protective apron, vapor respirator
						I-	Safety glasses, gloves, dust and vapor respirator
0-	Minimal: All chemicals have some degree of toxicity.	0-	Minimal: Will not burn under normal conditions.	0-	Normally stable: Does not react with water.	J-	Splash goggles, gloves, protective apron, dust and vapor respirator
						K-	Airline respirator, gloves, protective suit, boots
						X-	Ask your supervisor for special handling instructions

NA = Not Applicable      ND = Not Determined      NE = Not Established

The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, Advanced Chemical Technology makes no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for a particular purpose. Accordingly, Advanced Chemical Technology will not be responsible for damages of any kind resulting from the use of or reliance upon such information. No representations, or warranties, either expressed or implied or merchantability fitness for a particular purpose or of any other nature are made hereunder with respect to the information set forth herein or to the product to which the information refers.

**STABROM® 909 Biocide****Material Safety Data Sheet****Revision Date:** 20-Nov-2009  
**Supersedes** 22-Sep-2009**1. PRODUCT AND COMPANY IDENTIFICATION**

<b>Product Name</b>	STABROM® 909 Biocide		
<b>Chemical Name</b>	Proprietary.		
<b>Chemical Family</b>	Stabilized bromine biocide, aqueous solution		
<b>CAS-No</b>	Mixture		
<b>Recommended use</b>	Water treatment chemical		
<b>Company</b>	Albemarle Corporation 451 Florida Street Baton Rouge, LA 70801	<b>NFPA</b>	<b>HMIS</b>
		<b>Health</b>	
<b>Emergency Telephone Numbers</b>	225-344-7147		
<b>For Non-Emergency</b>	800-535-3030	<b>Flammability</b>	
		<b>Physical Hazards</b>	

**2. HAZARDS IDENTIFICATION****Emergency Overview**

Corrosive - causes irreversible eye damage

Causes skin burns

Harmful if swallowed

Harmful in contact with skin

Can decompose exothermically at elevated temperatures (see Environmental Protection, Storage Requirement Section for details)

**Potential Health Effects**

<b>Eyes</b>	Possible risks of irreversible effects.
<b>Skin</b>	Causes burns. Harmful in contact with skin.
<b>Inhalation</b>	In the event of fire and/or explosion do not breathe fumes. Not expected to be acutely toxic.
<b>Ingestion</b>	Harmful if swallowed.

See Section 11 for additional Toxicological information.

**Occupational Exposure Limit** See Section 8**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS-No	Weight %
Halogenated complex		18
Sodium hydroxide	1310-73-2	<10



#### 4. FIRST AID MEASURES

<b>Ad Lib</b>	If medical advice is needed: Have product container or label at hand.
<b>Eye contact</b>	If in eyes, hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
<b>Skin Contact</b>	If on skin or clothing, take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
<b>Inhalation</b>	Move to fresh air.
<b>Ingestion</b>	If swallowed, Call a physician or Poison Control Centre immediately. Have person sip a glass of water if able to swallow. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.
<b>Notes to Physician</b>	Probable mucosal damage may contraindicate the use of gastric lavage.

#### 5. FIRE-FIGHTING MEASURES

<b>Combustion/explosion hazards</b>	Not available.
<b>Suitable Extinguishing Media</b>	Not required
<b>Hazardous Combustion Products</b>	Bromine. Chlorine
<b>Protective Equipment and Precautions for Firefighters</b>	In the event of fire and/or explosion do not breathe fumes.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Ensure adequate ventilation..
<b>Environmental precautions</b>	Contain any spill with dikes or absorbents to prevent migration and entry into sewers or streams. Large spills should be collected mechanically (remove by pumping) for disposal. May require excavation of contaminated soil. Take up small spills by first diluting with water and then using a dehalogenating agent such as sodium thiosulfate solution.
<b>Methods for Clean-up</b>	Soak up with inert absorbent material (e.g. sand, silica gel, universal binder, sawdust).

## 7. HANDLING AND STORAGE

<b>Handling</b>	Avoid contact with skin, eyes and clothing.
<b>Storage</b>	<p>Avoid freezing, excessive heat or exposure to light, especially direct sunlight. If heating is necessary to prevent freezing, care must be taken to prevent overheating. Precautions should be taken to ensure that the average product temperature is maintained below 110F. Temperature monitoring is recommended. At elevated temperatures, self-heating can lead to vigorous gas generation and over-pressurization of storage containers if appropriate controls are not in place. Avoid exposure of this product to incompatible materials/chemicals (see Reactivity Data section). Use of incompatible materials can promote the exothermic decomposition of the product. In extreme cases, this could result in vigorous gas formation and over-pressurization of the storage container.</p> <p>STORAGE CONTAINER: Vented and opaque containers: As the product ages, activity is gradually lost and pressure can build-up in the headspace (nitrogen); therefore, the product should be stored in vented containers. Product should also be stored in opaque containers to prevent exposure to light. To maximize product shelf life, store the product in an opaque container, in a cool, dry, well-ventilated area.</p>

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	CAS-No	Weight %	ACGIH TLV (TWA)	ACGIH (STEL or Ceiling)	OSHA PEL (TWA)	OSHA (STEL or Ceiling)
Sodium hydroxide	1310-73-2	<10		2mg/m <sup>3</sup> (Ceiling)	2mg/m <sup>3</sup>	2mg/m <sup>3</sup> (Ceiling)

**Engineering Controls** Use only in well-ventilated areas.

### Personal Protective Equipment

<b>Eye/face Protection</b>	Chemical goggles or face shield with safety glasses.
<b>Skin Protection</b>	Wear protective gloves/clothing.
<b>Hand protection</b>	Gloves resistant to chemical permeation.
<b>Other information</b>	Wear suitable protective clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Flash point</b>	Not applicable.	<b>Flammable limits (LEL, UEL)</b>	No data available
<b>Form</b>	Liquid	<b>Vapor pressure</b>	19 mmHg(25°C)
<b>Color</b>	Yellow.	<b>Density</b>	1.29-1.37 g/ml(25°C)
<b>Odor</b>	Mild. Sweet.	<b>Vapor density</b>	No data available
<b>pH</b>	12.4(min.)	<b>Water Solubility</b>	Miscible.
<b>Boiling Point</b>	106°C	<b>Melting/freezing point</b>	0 °C / 32°F
<b>Viscosity, dynamic</b>	~2.7cPs(25°C)	<b>Viscosity, kinematic</b>	~2cSt(25°C)
<b>Oxidizing Properties</b>	Oxidizer		

**10. STABILITY AND REACTIVITY**

<b>Stability</b>	Stable.
<b>Conditions to Avoid</b>	Protect from light. Extremes of temperature and direct sunlight. Keep away from heat. Freezing.
<b>Materials to avoid</b>	This product is strongly basic and an oxidizing agent. Avoid contact with alcohols, aldehydes, strong reducing agents, strong oxidizers, acids, ammonia-containing products, and common metals such as steel, aluminum, iron and copper. Use of incompatible materials can promote the exothermic decomposition of the product.
<b>Hazardous decomposition products</b>	None under normal use.
<b>Hazardous Polymerization</b>	None under normal processing.

**11. TOXICOLOGICAL INFORMATION****Acute Effects**

<b>Eye contact</b>	Possible risks of irreversible effects.
<b>Skin contact</b>	Causes burns.
<b>Ingestion</b>	Harmful if swallowed.
<b>LD50 Oral:</b>	2491 mg/kg
<b>LD50 Dermal:</b>	>2000 mg/kg
<b>Inhalation LC50</b>	> 20.37mg/l

**12. ECOLOGICAL INFORMATION**

<b>Ecotoxicity</b>	
<b>LC50</b>	3.8 mg whole material/L; 96-hour; Bluegill Sunfish Lepomis Macrochirus
<b>Ecotoxicity effects</b>	No information available.

**13. DISPOSAL CONSIDERATIONS**

<b>Waste Disposal Method</b>	Dispose in a safe manner in accordance with local/national regulations.
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## 14. TRANSPORT INFORMATION

<b>DOT</b>	
<b>Proper Shipping Name</b>	Corrosive Liquids, Basic, Inorganic, N.O.S. (Halogenated Complex, Sodium Hydroxide)
<b>Hazard Class</b>	8
<b>UN No.</b>	3266
<b>Packing Group</b>	III
<b>Description</b>	UN 3266 Corrosive liquid, Basic, Inorganic, N.O.S. (Halogenated complex, Sodium hydroxide), 8, III

<b>IMDG/IMO</b>	
<b>IMO Class</b>	8
<b>Packing Group</b>	III
<b>UN-No</b>	3266
<b>IMO Labelling and Marking</b>	8
<b>Proper Shipping Name</b>	Corrosive liquid, Basic, Inorganic, N.O.S. (Halogenated complex, Sodium hydroxide)
<b>EmS</b>	F-A, S-B
<b>Marpol - Annex II</b>	Not determined
<b>Marpol - Annex III</b>	Unregulated
<b>Transport Description</b>	UN 3266 Corrosive liquid, Basic, Inorganic, N.O.S. (Halogenated complex, Sodium hydroxide), 8, III

<b>IATA/ICAO</b>	
<b>IATA/ICAO Class</b>	8
<b>Packing Group</b>	III
<b>UN-No</b>	3266
<b>IATA/ICAO Labelling</b>	8
<b>Passenger Aircraft</b>	Forbidden
<b>Cargo aircraft only</b>	Forbidden
<b>Proper shipping name</b>	Corrosive liquid, Basic, Inorganic, N.O.S. (Halogenated complex, Sodium hydroxide)
<b>Transport Description</b>	UN 3266 Corrosive liquid, Basic, Inorganic, N.O.S. (Halogenated complex, Sodium hydroxide), 8, III

## 15. REGULATORY INFORMATION

International Inventories	TSCA	DSL	NDSL	AICS	ENECS	ELINCS	ENCS	KECL	PICCS	CHINA	NZIoC
STABROM® 909 Biocide	-	-	-	X	-	-	-	X	X	X	X

(X) Complies (-) Does not Comply

**TSCA Statement**

THIS MATERIAL IS EXEMPT FROM THE TOXIC SUBSTANCES CONTROL ACT (15 USC 2601-2629)..

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazardous Categorization**

<b>Chronic Health Hazard</b>	No
<b>Acute Health Hazard</b>	Yes
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

**Reportable and Threshold Planning Quantities**

The following components have RQs and/or TPQs under SARA and/or CERCLA



Component	CAS-No	Weight %	SARA 302 RQ, lbs	CERCLA RQ, lbs	SARA 302 TPQ, lbs
Sodium hydroxide	1310-73-2	<10		1000	

**State Regulations**

This product contains the following chemicals regulated in the states listed below.

Component	CAS-No	California Prop. 65	Massachusetts	New Jersey	Pennsylvania
Sodium hydroxide	1310-73-2		Listed.	Listed.	Listed.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS Hazards**

E Corrosive material

D2B Toxic materials

**16. OTHER INFORMATION****Prepared By**

Health & Environment Department  
Albemarle Corporation

FOR ADDITIONAL NONEMERGENCY PRODUCT INFORMATION, CONTACT:

HEALTH AND ENVIRONMENT DEPARTMENT  
ALBEMARLE CORPORATION  
451 FLORIDA ST.  
BATON ROUGE, LA. 70801  
(800) 535-3030

The information contained herein is accurate to the best of our knowledge. The Company makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.

# MATERIAL SAFETY DATA SHEET

## MSDS

Page: 1 of 8  
Date-Issued: 10/03/1997  
MSDS Ref. No: BBIO61754  
Date-Revised: 11/09/2000  
Revision No: 4

### Super Ox-II

#### 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Super Ox-II  
GENERAL USE: Industrial water treatment.  
CHEMICAL FAMILY: Chlorinated Isocyanurates

##### MANUFACTURER

Bio-Lab, Inc.  
BioLab Water Additives Division  
P.O. Box 1489  
Decatur, GA 30031  
Customer SERVICE: (800) 600-4523

##### 24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (Transportation) (800) 424-9300  
Poison Control Center (Medical)(877) 800-5553

##### COMMENTS:

EPA Registration Number: 5185-54

#### 2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Wt. %
Sodium dichloro-s-triazinetriene	2893-78-9	97

#### 3. HAZARDS IDENTIFICATION

##### EMERGENCY OVERVIEW

##### PHYSICAL APPEARANCE:

White, granular material

##### IMMEDIATE CONCERNS:

**DANGER:** Highly Corrosive: Causes skin and eye damage. May be fatal if swallowed. Do not get in eyes, on skin, or on clothing. Wear goggles or safety glasses and rubber gloves when handling this product. Irritating to nose and throat. Avoid breathing dust and fumes. Remove contaminated clothing and wash before reuse.

##### POTENTIAL HEALTH EFFECTS

##### EYES:

Corrosive. Contact with dust or vapors can cause irritation, tearing, redness and pain, which may lead to blurred vision, severe tissue burns and even blindness. Avoid contact with eyes.

##### SKIN:

Corrosive. Contact with skin can cause skin irritation which may result in tissue burns if not removed promptly. Avoid contact with skin.

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### Super Ox-II

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#### INGESTION:

May cause burning of mouth, throat and esophagus, abdominal distress and severe irritation, possibly leading to corrosion of the digestive tract.

#### INHALATION:

Breathing dust or fumes may produce throat and respiratory tract irritation. Avoid breathing dust or fumes.

#### CHRONIC:

There are no known chronic hazards.

#### ROUTES OF ENTRY:

Skin Contact, Inhalation, Ingestion, Eye Contact.

---

## 4. FIRST AID MEASURES

#### EYES:

If in eyes: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

#### SKIN:

If on skin: Wash with plenty of soap and water. Get medical attention if irritation persists.

#### INGESTION:

If swallowed: Drink promptly large quantities of water. Avoid alcohol. Call a physician or poison control center immediately.

#### INHALATION:

If inhaled: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention.

#### NOTES TO PHYSICIAN:

Probable mucosal damage may contraindicate the use of gastric lavage.

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## 5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: Not Applicable

AUTOIGNITION TEMPERATURE: Not Applicable

#### GENERAL HAZARD:

This product, if heated by an outside source to temperatures above 240 C (464 F), will undergo vigorous self-sustaining decomposition with the evolution of heat and dense noxious gases. In addition, when in contact with another combustible material, this product will increase the burning rate of the combustible material. When ignited, will burn with the evolution of noxious chlorine containing gases.

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### Super Ox-II

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#### EXTINGUISHING MEDIA:

In case of fire or smoke, call the fire department. Do not attempt to extinguish the fire without a self-contained breathing apparatus (SCBA). Do not let the fire burn. Flood with copious amounts of water. DO NOT use ABC or other dry chemical extinguishers since there is the potential for a violent reaction.

#### EXPLOSION HAZARDS:

Nitrogen trichloride can be generated slowly by the reaction of small quantities of water with a high concentration of this product. Nitrogen trichloride can present an explosion hazard.

Immediately after a fire has been extinguished, check for wet or damp material. Any spilled material from burned or broken containers should be assumed contaminated. Neutralize to a non-oxidizing material for safe disposal. Do not attempt to re-close broken containers, even for movement to the disposal area. They should be left open to disperse any nitrogen trichloride that may form.

Material which appears undamaged except for being damp on the outside, should be opened and inspected immediately. If the plastic liner (where applicable) of the container is damaged or the material is damp, the material should be chemically treated if allowable, to a non-oxidizing material for safe disposal.

Bulging containers require extreme care. Contact the fire department.

#### FIRE FIGHTING PROCEDURES:

Firefighters should wear full protective clothing and self-contained breathing apparatus (SCBA). Using a 10% solution of sodium carbonate, thoroughly decontaminate fire fighting equipment including all fire fighting wearing apparel after the incident.

---

## 6. ACCIDENTAL RELEASE MEASURES

#### GENERAL PROCEDURES:

Using appropriate protective clothing and safety equipment, contain spilled material. Do not add water to spilled material. Using clean dedicated equipment, sweep and scoop all spilled material, contaminated soil, and other contaminated material and place into clean dry containers for disposal. Do not use floor sweeping compounds to clean up spills. Do not close containers containing wet or damp material. They should be left open to disperse any hazardous gases that may form. Do not transport wet or damp material. Keep product out of sewers, watersheds and water systems. Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment. Dispose of according to local, state and federal regulations.

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## 7. HANDLING AND STORAGE

#### HANDLING:

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# MATERIAL SAFETY DATA SHEET

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### Super Ox-II

**STRONG OXIDIZING AGENT:** Do not mix with other chemicals. Mix only with water. Never add water to product. Always add product to large quantities of water. Use clean dry utensils. Do not add this product to any dispensing device containing remnants of any other product. Such use may cause a violent reaction leading to fire or explosion. Contamination with moisture, organic matter or other chemicals will start a chemical reaction and generate heat, hazardous gas, possible fire and explosion. In case of contamination or decomposition, do not reseal container. If possible, isolate container in open air or well ventilated area. Flood area with large volumes of water.

#### STORAGE:

Keep this product in original closed container when not in use. Store in a cool, dry, well ventilated area away from heat or open flame. Do not contaminate water, food or feed by storage or disposal or cleaning of equipment. Do not store above 125 F (52 C).

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### EXPOSURE GUIDELINES:

#### OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		SUPPLIER OEL	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Sodium dichloro-s-triazinetriene	TWA	N/E <sup>(1)</sup>		N/E			

#### OSHA TABLE COMMENTS:

1. N/E = Not Established

#### ENGINEERING CONTROLS:

General room ventilation plus local exhaust should be used to minimize exposure to dust/vapors.

#### PERSONAL PROTECTIVE EQUIPMENT:

##### EYES AND FACE:

Wear goggles or safety glasses with side shields when handling this product.

##### SKIN:

Wear rubber gloves when handling this product. Avoid contact with skin.

##### RESPIRATORY:

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

#### WORK HYGIENIC PRACTICES:

Remove and wash contaminated clothing before reuse.

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### Super Ox-II

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#### OTHER USE PRECAUTIONS:

Facilities storing or utilizing this material should be equipped with an eyewash and safety shower.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Solid

ODOR: Chlorine

APPEARANCE: Granules

COLOR: White

pH: 6 to 7(1% solution @ 25 C)

VAPOR PRESSURE: Not Available

VAPOR DENSITY: Not Determined

BOILING POINT: Not Applicable

FREEZING POINT: Not Applicable

MELTING POINT: 240°C (464°F) to 250°C (480°F)

SOLUBILITY IN WATER: 24g / 100g water

DENSITY: 56 - 60 lb / cu. ft.

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## 10. STABILITY AND REACTIVITY

#### CONDITIONS TO AVOID:

High temperature. Poor ventilation. Contamination. Moisture/high humidity.

#### STABILITY:

This product is stable under normal conditions.

#### POLYMERIZATION:

Hazardous polymerization will not occur under normal conditions.

#### HAZARDOUS DECOMPOSITION PRODUCTS:

Chlorine containing gases can be produced.

#### INCOMPATIBLE MATERIALS:

This material is a strong oxidizing agent. Avoid contact with water on concentrated material in the container. Also avoid contact with easily oxidizable organic material; ammonia, urea, or similar nitrogen containing compounds; inorganic reducing compounds; floor sweeping compounds; calcium hypochlorite; alkalis; other swimming pool/spa chemicals in their concentrated forms.

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# MATERIAL SAFETY DATA SHEET

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### Super Ox-II

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

DERMAL LD<sub>50</sub>: 6000 mg/kg of body weight in rabbits.

ORAL LD<sub>50</sub>: 700 mg/kg of body weight in rats

On contact with moisture, this material readily hydrolyzes to hypochlorous acid and cyanuric acid. The tissue damage resulting from contact is considered to result, in part, from its hypochlorous acid decomposition products. May cause gastrointestinal and respiratory tract irritation. May be severely irritating or corrosive to eyes and skin.

### EYE EFFECTS:

This product is corrosive to eyes.

### SKIN EFFECTS:

This product is corrosive to skin.

### CHRONIC / SUBCHRONIC:

Chronic exposure to large amounts of this compound has not been characterized and the irritating properties of the compound make such an exposure highly unlikely.

### CARCINOGENICITY:

This product is not listed as a carcinogen by IARC.

This product is not listed as a carcinogen by NTP.

This product is not listed as a carcinogen by OSHA.

## 12. ECOLOGICAL INFORMATION

### ECOTOXICOLOGICAL INFORMATION:

This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds or estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

## 13. DISPOSAL CONSIDERATIONS

### DISPOSAL METHOD:

Pesticide wastes are toxic. Improper disposal of excess pesticide or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance. Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment. Do not put product, spilled product, or filled or partially filled containers into the trash or waste compactor. Contact with incompatible materials could cause a reaction or fire.

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### Super Ox-II

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#### EMPTY CONTAINER:

Do not reuse container. Rinse thoroughly before discarding in trash.

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## 14. TRANSPORT INFORMATION

#### DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Dichloroisocyanuric Acid, Dry

PRIMARY HAZARD CLASS/DIVISION: 5.1

UN/NA NUMBER: 2465

PACKING GROUP: II

#### CANADA TRANSPORT OF DANGEROUS GOODS

PROPER SHIPPING NAME: Dichloroisocyanuric Acid, Dry

PRIMARY HAZARD CLASS/DIVISION: 5.1

UN/NA NUMBER: 2465

PACKING GROUP: II

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## 15. REGULATORY INFORMATION

#### UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES:

FIRE: YES PRESSURE GENERATING: NO REACTIVITY: YES ACUTE: YES CHRONIC: NO

313 REPORTABLE INGREDIENTS: This product or its components are not listed.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: This product or its components are not listed.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: This product or its components are not subject to export notification.

TSCA STATUS: This product or its components are listed on the TSCA Inventory.

OSHA HAZARD COMM. RULE:

Product is hazardous by definition of the Hazardous Communication Standard.

FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT):

This product is a registered pesticide.

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## 16. OTHER INFORMATION

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# MATERIAL SAFETY DATA SHEET

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**Super Ox-II**

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## REVISION SUMMARY

Revision #: 4

This MSDS replaces the November 01, 2000 MSDS. Any changes in information are as follows:

## NFPA CODES

HEALTH: 3    FIRE: 1    REACTIVITY: 1

## NFPA STORAGE CLASSIFICATION:

NFPA Oxidizer Class 3

## HMS CODES

HEALTH: 3    FIRE: 1    REACTIVITY: 1    PROTECTION: B

## MANUFACTURER DISCLAIMER:

IMPORTANT: This information is given without a warranty or guarantee. No suggestions for use are intended or shall be construed as a recommendation to infringe any existing patents or violate any Federal, State or local laws. Safe handling and use is the responsibility of the customer. Read the label before using this product. This information is true and accurate to the best of our knowledge.

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# BUCKMAN LABORATORIES, INC.

## MATERIAL SAFETY DATA SHEET

### TBCH

Revision date: 8/21/2003

Phone 1-800-BUCKMAN

Buckman Laboratories, Inc.  
1256 North McLean Boulevard  
Memphis, TN 38108

**24 Hour Emergency Phone: (901) 767-2722**

#### SECTION 1

#### OSHA HAZARD CLASSIFICATIONS

**Oxidizer. Causes burns. May cause skin sensitization.**

#### SECTION 2

#### HAZARDOUS COMPONENTS

<u>Chemical Name</u>	<u>CAS Number</u>	<u>% by Weight</u>	<u>TLV</u>
Bromo, chloro-5,5-dimethylhydantoin	32718-18-6	98	Not available.

*The remainder of the components comprise proprietary information.*

#### SECTION 3

#### FIRST AID INFORMATION

**Eye Exposure:** Flush immediately with copious amounts of tap water or normal saline (minimum of 15 minutes). Take exposed individual to a health care professional, preferably an ophthalmologist, for further evaluation.

**Skin Exposure:** Wash exposed area with plenty of water. Repeat washing. Remove contaminated clothing and wash thoroughly before reuse. If irritation persists consult a health care professional.

**Inhalation:** If exposure by inhalation is suspected, immediately move exposed individual to fresh air. If individual experiences nausea, headache, dizziness, has difficulty in breathing or is cyanotic, seek a health care professional immediately.

**Ingestion:** **DO NOT INDUCE VOMITING.** Rinse with copious amounts of water or milk, first. Irrigate the esophagus and dilute stomach contents by slowly giving one (1) to two (2) glasses of water or milk. Avoid giving alcohol or alcohol related products. In cases where the individual is semi-comatose, comatose or convulsing, **DO NOT GIVE FLUIDS BY MOUTH.** In case of intentional ingestion of the product seek medical assistance immediately; take individual to nearest medical facility.

#### SECTION 4

#### PRIMARY ROUTES OF EXPOSURE

##### **I. Effects from Acute Exposure:**

**Eye Exposure:** Very hazardous in case of eye contact (irritant, corrosive). Eye contact can result in corneal damage or blindness. Inflammation of the eye is characterized by redness, watering, and itching.

**Skin Exposure:** Hazardous in case of skin contact (corrosive, irritant). The amount of tissue damage depends on length of contact. Skin contact can produce inflammation and blistering. Skin contact may produce burns. Prolonged exposure may result in skin burns and ulcerations. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

**Inhalation:** May be harmful if inhaled. Do not breathe spray mists of the undiluted product. Effects will depend upon solution strength and length of time of exposure.



**Ingestion:** Ingestion is not expected to be a primary route of exposure.

## **2. Effects from Chronic Exposure:**

The effects from chronic exposure to this product have not been evaluated.

SECTION 5	Toxicological Information
-----------	---------------------------

### **Acute Effects:**

Acute Oral (LD50) = 929 mg/kg Rat  
Acute Inhalation (LC50) = 1.1 mg/l (4 hours) Rat

### **Irritant / Sensitization Effects:**

Very hazardous in case of eye contact (irritant, corrosive). Eye contact can result in corneal damage or blindness. Inflammation of the eye is characterized by redness, watering, and itching.  
Hazardous in case of skin contact (corrosive, irritant). The amount of tissue damage depends on length of contact. Skin contact can produce inflammation and blistering. Skin contact may produce burns. Prolonged exposure may result in skin burns and ulcerations. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.  
May be harmful if inhaled. Do not breathe spray mists of the undiluted product. Effects will depend upon solution strength and length of time of exposure.

### **Carcinogenic Potential:**

Not tested by Buckman Laboratories. Not shown as a carcinogen by OSHA, IARC, or NTP.

### **Target Organs Effects:**

May cause damage to the following organs: upper respiratory tract, skin, eyes.

### **Other Health Effects:**

Inhalation may cause irritation of the upper respiratory tract. Shortness of breath, headache and nausea may occur. Exposure to wet skin may cause severe irritation. Mutagenic by the Ames Test.

SECTION 6	Environmental Toxicological Information
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LC50 = 1.2 mg/l 96 hours Eastern oyster (acute flow through)  
LC50 = 1.9 mg/l 96 hours Mysid shrimp (acute flow through)  
LC50 = 0.4 mg/l 96 hours Rainbow trout (static)  
LC50 = 0.46 mg/l 96 hours Bluegill sunfish (static)  
LC50 = 1.6 mg/l 96 hours Sheepshead minnow (acute flow through)  
LC50 = 0.75 mg/l 48 hours Daphnia magna (static)

SECTION 7	Physical and Chemical Properties
-----------	----------------------------------

<b>Appearance</b> .....	White to off-white tablet, solid
<b>Odor</b> .....	Halogenous (Slight.)
<b>Density</b> .....	1.9 g/cm <sup>3</sup>
<b>Flash Point</b> .....	Not available.
<b>Melting/Freezing Point</b> ....	Not available.
<b>Boiling Point</b> .....	Not available.
<b>Solubility</b> .....	Very slightly soluble in cold water. Very slightly soluble in hot water.
<b>pH (Neat)</b> .....	Not available.
<b>pH (100 ppm in water)</b> .....	Not available.
<b>Vapor Pressure</b> .....	Not applicable for solids.
<b>o/v Partition Coefficient</b> .....	Not available.
<b>Oxidizing/Reducing Properties</b> ..	Not available.

Viscosity ..... Not available.

Additional pH Information ..... Not available.

**SECTION 8*****Fire and Explosion Information***

Flammable Limits ..... Not available.

Extinguishing Media ..... Water fog, carbon dioxide, foam, dry chemical.

Special Firefighting Procedures ..... Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

**SECTION 9*****Reactivity Information***

Stability ..... Stable under normal conditions of use and storage. Keep away from all sources of ignition. The minimum recommended storage temperature for this material is 20C. The maximum recommended storage temperature for this material is 30C. Store in dry, well ventilated area away from incompatible materials (see incompatibilities below). Avoid heating above 160C.

Incompatibility ..... Bases, oxidizing agents, combustible organic materials

Hazardous Decomposition Products ..... Hydrogen bromide, bromine, hydrochloric acid

**SECTION 10*****Handling Precautions***

**Ventilation Requirements:** Use local exhaust as necessary, especially under dusty conditions.

**Personal Protective Equipment:**

- |                  |                                 |
|------------------|---------------------------------|
| -Hand protection | PVC gloves                      |
| -Eye protection  | Chemical safety goggles         |
| -Skin protection | Body covering clothes and boots |

**Hygiene Measures:**

Safety shower and eye bath should be provided. Do not eat, drink or smoke until after-work showering and changing clothes.

If dusting can occur, a NIOSH approved dust respirator is recommended.

**SECTION 11*****Satisfactory Materials of Construction***

Not available.

**SECTION 12*****Spill, Leak, and Disposal Procedures*****SPILL AND LEAK RESPONSE GUIDELINES:**

**Important:** Before responding to a spill or leak of this product, review each section of this MSDS. Follow the recommendations given in the Handling Precautions sections. Check the Fire and Explosion Data section to determine if the use of non-sparking tools is merited. Insure that spilled or leaked product does not come into contact with materials listed as incompatible. If irritating fumes are present, consider evacuation of affected areas.

**Emergency Response Assistance:** Emergency technical assistance is available at any time from Buckman Laboratories, Inc., by calling (901) 767-2722. Collect calls are accepted.

Initially minimize area affected by the spill or leak. Block any potential routes to water systems (e.g., sewers, streams, lakes, etc.). Based on the product's toxicological and chemical properties, and on the size and location of the spill or leak, assess the impact on contaminated environments (e.g. water systems, ground, air equipment, etc.). There are no methods available to completely eliminate any toxicity this product may have on aquatic environments. Minimize adverse effects on these environments. Buckman Laboratories, Inc. can be contacted for technical assistance. Determine if federal, state, and/or local release notification is required (see Regulatory Information section of this MSDS). Recover as much of the pure product as possible into appropriate containers. Later, determine if this recovered product can be used for its intended purpose. Address clean-up of contaminated environments. Spill or leak residuals may have to be collected and disposed of. Clay, soil, or commercially available absorbents may be used to recover any material that can not readily be recovered as pure product. Flushing residual material to an industrial sewer, if present at the site of a spill or leak incident, may be acceptable if authorized approval is obtained. If product and/or spill/leak residuals are flushed to an industrial sewer, insure that they do not come into contact with incompatible materials.

**DISPOSAL GUIDELINES**

**Note:** Follow federal, state, and local regulations governing the disposal of waste materials.

**Neat Product:** Contact your Buckman representative.

**Contaminated Materials:** Determine if waste containing this product can be handled by available industrial effluent system or other on-site waste management unit. If off-site management is required, contact a company experienced in industrial waste management.

**Container Disposal:** If assistance is needed, contact your Buckman sales representative.

## SECTION 13

### *Transportation and Shipping Information*

#### *DOT Shipping Information:*

**OXIDIZING SOLID, CORROSIVE, N.O.S., (Bromo, chloro-5, 5-dimethylhydantoin), Class 5.1, (8), UN3085, P.G. II, ( ERG Guide 140 )**

#### *IMO/IMDG Shipping Information:*

**OXIDIZING SOLID, CORROSIVE, N.O.S., (Bromo, chloro-5, 5-dimethylhydantoin), Class 5.1, UN3085, P.G. II, (8), MARINE POLLUTANT, ( EmS No. 5.1-05, ERG Guide 140, HazMat Code 4918546 )**

#### *IATA Shipping Information:*

**OXIDIZING SOLID, CORROSIVE, N.O.S., (Bromo, chloro-5, 5-dimethylhydantoin), Class 5.1, (8), UN3085, P.G. II, ( ERG Guide 140, ERG Code 5C )**

-----  
Unless otherwise stated, the shipping information provided above applies only to non-bulk containers of this product. Proper shipping name and general shipping information may vary depending on packaging and mode of shipment. All products shipped from Buckman locations have been properly packaged and labeled according to appropriate hazardous materials shipping regulations. If any alteration of packaging, product, or mode of transportation is further intended, different shipping information, including but not limited to proper shipping name, RQ designation, and labeling may apply. For further information pertaining to the shipping requirements for this product, contact Buckman's Transportation Department or DOT Coordinator.

## SECTION 14

### *Regulatory Information*

The following Regulations are known to apply to the use and disposal of this product. Additional Federal, State and Local regulations may also be applicable.

#### **SARA (Superfund Amendments and Reauthorization Act)**

*SARA 302 Extremely Hazardous Substances List ...*

No components of this product are listed.

*SARA 312 Hazard Category ...*

Reactive, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard

*SARA 313 Toxic Chemicals List ...*

No components of this product are present above the *de minimus* levels.

#### **CERCLA (Comprehensive Environmental Response, Compensation and Liability Act)**

Bromo, chloro-5,5-dimethylhydantoin ..... RQ = 100 lbs. (45.36 kg)

#### **RCRA (Resource Conservation and Recovery Act) Listed Hazardous Waste**

This material may be classified as a RCRA hazardous waste with the characteristic of ignitability. Hazardous waste number: D001.

#### **CWA (Clean Water Act) Listed Substances**

No components of this product are listed.

#### **FDA ( Food and Drug Administration)**

This product is not approved for food contact uses.

#### **TSCA (Toxic Substances Control Act) Applicability**

All components may not be listed on the TSCA Inventory. Registered pesticides are exempt from the requirements of TSCA.

#### **FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act)**

This product is a registered pesticide. EPA Reg. No. 1448-420

**HMIS/NPCA Rating ...** Health 3 Flammability 0 Reactivity 1

**NFPA Ratings .....** Health 3 Flammability 0 Reactivity 1

**State Regulations**

*Various State Right To Know Acts ...*

Non-proprietary hazardous chemicals are listed in Section 2 of this MSDS. Should you require further information on specific proprietary or inert ingredients please contact Buckman Laboratories' Regulatory Affairs Department.

The information on this Material Safety Data Sheet reflects the latest information and data that we have on hazards, properties, and handling of this product under the recommended conditions of use. Any use of this product or method of application which is not described in the Data Sheet is the responsibility of the user. This Material Data Safety Sheet was prepared to comply with the OSHA Hazard Communication regulations.

Buckman Laboratories, Inc. warrants that this product conforms to its chemical description and is reasonably fit for the purpose referred to in the directions for use when used in accordance with the directions under normal conditions. Buyer assumes the risk of any use contrary to such directions.

Seller makes no other warranty or representation of any kind, express or implied, concerning the product, including NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS OF THE GOODS FOR ANY OTHER PARTICULAR PURPOSE. No such warranties shall be implied by law and no agent of seller is authorized to alter this warranty in any way except in writing with a specific reference to this warranty.

The exclusive remedy against seller shall be in a claim for damages not to exceed the purchase price of the product, without regard to whether such a claim is based upon breach of warranty or tort.

Any controversy or claim arising out or relating to this contract, or breach thereof, shall be settle by arbitration in accordance with the commercial arbitration rules of the American Arbitration Association, and judgement upon the rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.



## MATERIAL SAFETY DATA SHEET

B939L VER 04-1 DATE: 10/8/04 SW

24 HOUR TELEPHONE NUMBER (CHEMTREC) 800-424-9300

### SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: B939LPRODUCT TYPE: CORROSION INHIBITOR FOR CLOSED SYSTEMSCHEMICAL FAMILY: ALKALINE

### SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>COMPONENT</u>	<u>CAS NUMBER.</u>	<u>OSHA STEL</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
SODIUM NITRITE	7632-00-0	NONE	NONE	NONE
SODIUM TOLYTRIAZOLE	64665-57-2	NONE	NONE	NONE
SODIUM HYDROXIDE	1310-73-2	2 ppm	2 ppm	2 ppm
BORAX	1303-96-4	5 ppm	10 ppm	5 ppm

### SECTION 3. HAZARDS IDENTIFICATION

THIS CLEAR BLUE LIQUID IS AN OXIDIZER AND CORROSIVE AND IS HARMFUL IF SWALLOWED.

INHALATION: MIST HARMFUL IF INHALED. OVEREXPOSURE BY INHALATION OR INGESTION MAY CAUSE REDUCED OXYGEN CARRYING CAPACITY OF BLOOD AND POSSIBLE CYANOSIS, METHEMOGLOBINEMIA AND CONVULSIONS DEATH.

EYE CONTACT: MIST MAY SEVERELY IRRITATE OR BURN THE EYES.

SKIN CONTACT: MAY IRRITATE AND BURN THE SKIN OVER A PROLONGED TIME.

INGESTION: CAN CAUSE NAUSEA, HEADACHE, WEAKNESS, AND SHORTNESS OF BREATH. ONE GRAM MAY BE TOXIC - SEE INHALATION.

CHRONIC: NO SIGNIFICANT EFFECTS HAVE BEEN FOUND.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: NONE.

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#### **SECTION 4. FIRST AID MEASURES**

<u>INHALATION:</u>	MOVE SUBJECT TO FRESH AIR.
<u>EYES:</u>	FLUSH WITH LARGE AMOUNTS OF WATER FOR 15 MINUTES. GET IMMEDIATE MEDICAL ATTENTION.
<u>SKIN:</u>	WASH AFFECTED SKIN AREAS THOROUGHLY WITH SOAP AND WATER. CONSULT A PHYSICIAN IF BURNS OR IRRITATION DEVELOP.
<u>INGESTION</u>	IF SWALLOWED, GIVE 2 GLASSES OF WATER TO DRINK. GET MEDICAL ATTENTION IMMEDIATELY. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.
<u>TARGET ORGAN:</u>	POINT OF CONTACT
<u>MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:</u>	NOT DETERMINED.

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#### **SECTION 5. FIRE FIGHTING MEASURES**

<u>FLASH POINT:</u>	DOES NOT BURN
<u>AUTO-IGNITION TEMPERATURE:</u>	NOT APPLICABLE
<u>FLAMMABLE LIMITS:</u>	
<u>LOWER EXPLOSIVE LIMIT (LEL):</u>	NOT APPLICABLE
<u>UPPER EXPLOSIVE LIMIT (UEL):</u>	NOT APPLICABLE
<u>GENERAL HAZARD:</u>	THIS MATERIAL IS A LIQUID WHICH DOES NOT BURN BUT WHICH CONTAINS AN OXIDIZER.
<u>EXTINGUISHING AGENTS:</u>	DOES NOT BURN
<u>PERSONAL PROTECTIVE EQUIPMENT:</u>	USE NIOSH APPROVED SELF CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. USE WATER SPRAY TO KEEP CONTAINERS COOL.
<u>HAZARDOUS COMBUSTION PRODUCTS:</u>	HIGH TEMPERATURES YIELD OXIDES OF CARBON AND NITROGEN.

---

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

### **PERSONAL PROTECTION:**

WEAR GOGGLES, RUBBER GLOVES AND A RUBBER APRON.

### **PROCEDURE:**

LAND:

COLLECT AND TRANSFER TO A WASTE DRUM.

PREVENT ANY MATERIAL FROM GOING TO A STORM SEWER, STREAM, OR RIVER.

WATER:

NOTIFY AUTHORITIES.

---

## **SECTION 7. HANDLING AND STORAGE**

### **STORAGE:**

STORE IN A COOL, DRY PLACE. KEEP CONTAINER CLOSED.

USE ADEQUATE VENTILATION. PROTECT FROM FREEZING.

### **HANDLING:**

WEAR PROPER PROTECTIVE EQUIPMENT. WASH HANDS  
AFTER USE

---

## **SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** USE LOCAL EXHAUST VENTILATION.

**RESPIRATORY PROTECTION:** NONE.

**EYE PROTECTION:** USE GOGGLES.

**HAND PROTECTION:** USE ELBOW LENGTH RUBBER GLOVES. USE A RUBBER APRON WITH  
LARGE AMOUNTS

**OTHER PROTECTION:** EYE WASH STATION

---

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>APPEARANCE:</b>	<b>CLEAR BLUE LIQUID</b>
<b>pH :</b>	<b>12.0-13.0</b>
<b>BOILING POINT:</b>	<b>NOT DETERMINED</b>
<b>ODOR:</b>	<b>ODORLESS</b>
<b>SPECIFIC GRAVITY:</b>	<b>1.35</b>
<b>BULK DENSITY:</b>	<b>11.26 LBS./GAL.</b>

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## **SECTION 10. STABILITY AND REACTIVITY**

**STABILITY:** STABLE

**HAZARDOUS DECOMPOSITION PRODUCTS:** NONE

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**HAZARDOUS POLYMERIZATION:** NONE

**INCOMPATIBILITY:** DO NOT MIX WITH ACIDS AND REDUCING AGENTS.

---

## **SECTION 11. TOXICOLOGICAL INFORMATION**

### **CARCINOGENIC INFORMATION:**

**CAS#:** NONE

**IARC:** NOT LISTED

**NTP:** NOT LISTED

**OSHA:** NOT LISTED

**ACGIH:** NOT LISTED

---

## **SECTION 12. ECOLOGICAL INFORMATION**

**DANGEROUS TO ANIMALS - IMMEDIATELY CLEAN UP SPILLS.**

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

**DISPOSE IN ACCORDANCE TO LOCAL, STATE, AND FEDERAL GUIDELINES.**

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## **SECTION 14. TRANSPORT INFORMATION**

**DOT SHIPPING INSTRUCTIONS:** OXIDIZING LIQUID, CORROSIVE LIQUID, N. O. S., (Contains Sodium Nitrite, Sodium Hydroxide), 5.1, UN3098, PG II

**HAZARD CLASS:** OXIDIZER, 5.1

---

## **SECTION 15. REGULATORY INFORMATION**

**SARA TITLE 3 (311/312):** IMMEDIATE (ACUTE) HEALTH HAZARD

**SARA TITLE 3 (313):** CONTAINS SODIUM NITRITE, A REPORTABLE COMPONENT.

**CERCLA:** CONTAINS SODIUM NITRITE, A REPORTABLE COMPONENT WHICH IS REPORTABLE AT THE 300 POUNDS OF PRODUCT RELEASED LEVEL.

**TSCA:** ALL COMPONENTS ARE LISTED ON THE TSCA INVENTORY

---

## **SECTION 16. OTHER INFORMATION**

### **NFPA RATINGS:**

**HEALTH HAZARD...2**

**FLAMMABILITY.....0**

**REACTIVITY.....0**

**OTHER.....OXIDIZER, CORROSIVE (BASIC)**

**NATIONAL FIRE PROTECTION ASSOCIATION HAZARD RATINGS:**

**0-INSIGNIFICANT 1-SLIGHT 2-MODERATE 3-HIGH**

**4-EXTREME U-UNKNOWN \*-NO INFORMATION**

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**MATERIAL SAFETY DATA SHEET**

C876L VER 06-1 DATE: 6/26/06

24 HOUR TELEPHONE NUMBER (CHEMTREC) 800-424-9300

**SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION**

**PRODUCT NAME:** C876L  
**PRODUCT TYPE:** SCALE AND CORROSION INHIBITOR FOR COOLING TOWERS  
**CHEMICAL FAMILY:** POLYMER

**SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS**

<b>COMPONENT</b>	<b>CAS NUMBER.</b>	<b>OSHA STEL</b>	<b>OSHA PEL</b>	<b>ACGIH TLV</b>
<b>HEDP ( 1-HYDROXYETHYLIDENE-1,1-DIPHOSPHONIC ACID )</b>	<b>2809-21-4</b>	<b>NONE</b>	<b>NONE</b>	<b>NONE</b>
<b>SODIUM POLYACRYLATE</b>	<b>9003-04-7</b>	<b>NONE</b>	<b>NONE</b>	<b>NONE</b>

**SECTION 3. HAZARDS IDENTIFICATION**

THIS LIQUID PRODUCT IS CORROSIVE.

**INHALATION:** INHALATION OF MIST MAY PRODUCE IRRITATION AND BURNS OF THE RESPIRATORY TRACT AND MAY RESULT IN PULMANARY EDEMA.

**EYE CONTACT:** SEVERE IRRITATION AND BURNS.

**SKIN CONTACT:** STRONG IRRITATION AND BURNS.

**INGESTION:** MAY RESULT IN SEVERE GASTRIC DISTURBANCE, INCLUDING NAUSEA AND VOMITING.

**CHRONIC:** NO SIGNIFICANT EFFECTS HAVE BEEN FOUND.

**TARGET ORGAN:** POINT OF CONTACT.

**SECTION 4. FIRST AID MEASURES**

**INHALATION:** MOVE SUBJECT TO FRESH AIR.GET IMMEDIATE MEDICAL ATTENTION.

**EYES:** FLUSH WITH LARGE AMOUNTS OF WATER FOR 15 MINUTES.  
GET IMMEDIATE MEDICAL ATTENTION.

**SKIN:** WASH AFFECTED SKIN AREAS THOROUGHLY WITH SOAP AND WATER. CONSULT A PHYSICIAN IF BURNS OR IRRITATION DEVELOP.

**INGESTION** IF SWALLOWED, GIVE 2 GLASSES OF WATER TO DRINK.  
GET MEDICAL ATTENTION IMMEDIATELY. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. DO NOT INDUCE VOMITING.

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C876L

arc



**TARGET ORGAN:** POINT OF CONTACT.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** NOT DETERMINED.

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## **SECTION 5. FIRE FIGHTING MEASURES**

<b>FLASH POINT:</b>	NOT FLAMMABLE
<b>AUTO-IGNITION TEMPERATURE:</b>	NOT DETERMINED
<b>LOWER EXPLOSIVE LIMIT (LEL):</b>	N/A
<b>UPPER EXPLOSIVE LIMIT (UEL):</b>	N/A

**EXTINGUISHING AGENTS:**

CARBON DIOXIDE OR USE DRY CHEMICAL FOR SMALL FIRES.

**PERSONAL PROTECTIVE EQUIPMENT:**

USE A NIOSH APPROVED SELF CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. USE A WATER SPRAY TO KEEP CONTAINERS COOL.

**HAZARDOUS COMBUSTION PRODUCTS:**

HIGH TEMPERATURES YIELD OXIDES OF NITROGEN AND CARBON.

---

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

**PERSONAL PROTECTION:**

WEAR GOGGLES, RUBBER GLOVES AND A RUBBER APRON.

**PROCEDURE:**

LAND:

NEUTRALIZE WITH SODA ASH, THEN ADD ABSORBANT, COLLECT AND TRANSFER TO A WASTE DRUM.

WATER:

PREVENT ANY MATERIAL FROM GOING TO A STORM SEWER, STREAM, OR RIVER.  
NOTIFY AUTHORITIES.

---

## **SECTION 7. HANDLING AND STORAGE**

**STORAGE:**

STORE IN A COOL, DRY PLACE. KEEP CONTAINER CLOSED.  
USE ADEQUATE VENTILATION.

**HANDLING:**

WEAR PROPER PROTECTIVE EQUIPMENT. WASH HANDS  
AFTER USE

---

## **SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** USE LOCAL EXHAUST VENTILATION.

**RESPIRATORY PROTECTION:** NONE.

**EYE PROTECTION:** USE GOGGLES.

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**HAND PROTECTION:** USE ELBOW LENGTH RUBBER GLOVES AND APRON.

**OTHER PROTECTION:** EYE WASH STATION

---

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>APPEARANCE:</b>	<b>CLEAR LIQUID</b>
<b>pH:</b>	<b>LESS THAN 1.0</b>
<b>BOILING POINT:</b>	<b>NOT DETERMINED</b>
<b>ODOR:</b>	<b>AZOLE</b>
<b>SPECIFIC GRAVITY:</b>	<b>1.23</b>
<b>BULK DENSITY:</b>	<b>9.70 LBS./GAL.</b>
<b>FREEZING POINT:</b>	<b>28° F</b>
<b>SOLUBILITY:</b>	<b>COMPLETE</b>

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**SECTION 10. STABILITY AND REACTIVITY**

**STABILITY:** STABLE

**HAZARDOUS DECOMPOSITION PRODUCTS:** NONE

**HAZARDOUS POLYMERIZATION:** NONE

**INCOMPATIBILITY:** DO NOT MIX WITH ALKALIES AND STRONG OXIDIZERS.

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**SECTION 11. TOXICOLOGICAL INFORMATION**

**CARCINOGENIC INFORMATION:**

**CAS#:** NONE

**IARC:** NOT LISTED

**NTP:** NOT LISTED

**OSHA:** NOT LISTED

**ACGIH:** NOT LISTED

---

**SECTION 12. ECOLOGICAL INFORMATION**

NONE

---

**SECTION 13. DISPOSAL CONSIDERATIONS**

DISPOSE IN ACCORDANCE TO LOCAL, STATE, AND FEDERAL GUIDELINES.

---

**SECTION 14. TRANSPORT INFORMATION**

**DOT SHIPPING INSTRUCTIONS:** CORROSIVE LIQUID, ACIDIC, ORGANIC N.O.S., (CONTAINS PHOSPHONIC ACID), 8, UN3265, PGII

**HAZARD CLASS:** CORROSIVE, 8

**CORPORATE OFFICE:** 113 Bloomingdale Road, Hicksville, NY 11801 (516) 932-3030 FAX: (516) 932-0014

Representation in the Continental United States, Hawaii and Puerto Rico • TOLL FREE: (800) 247-3973

Members of: CTI •ASHRAE •NADCA •AWT •ACCA •BOMA •AFE •NAPE

[www.cascadewater.com](http://www.cascadewater.com)



C876L

arc

**SECTION 15. REGULATORY INFORMATION**

<i>SARA TITLE 3 (311/312):</i>	<b>HEALTH</b>	<b>IMMEDIATE (Acute)</b>	<b>YES</b>
	<b>HEALTH</b>	<b>DELAYED (Chronic)</b>	<b>NO</b>
	<b>PHYSICAL</b>	<b>FIRE</b>	<b>NO</b>
	<b>PHYSICAL</b>	<b>SUDDEN RELEASE OF PRESSURE</b>	<b>NO</b>
	<b>PHYSICAL</b>	<b>REACTIVE</b>	<b>NO</b>
		<b>NUISANCE MIST</b>	<b>YES</b>

*SARA TITLE 3 (313):* NOT LISTED

*CERCLA:* NONE

*WASTE DISPOSAL (RCRA):* MEET THE CLASSIFICATIONS OF CORROSIVITY.

*TSCA:* ALL COMPONENTS ARE LISTED ON THE TSCA INVENTORY.

**SECTION 16. OTHER INFORMATION****NFPA RATINGS:**

**HEALTH HAZARD...2**  
**FLAMMABILITY.....0**  
**REACTIVITY.....0**  
**OTHER.....CORROSIVE, ACID**

**NATIONAL FIRE PROTECTION ASSOCIATION HAZARD RATINGS:**

**0-INSIGNIFICANT    1-SLIGHT    2-MODERATE    3-HIGH**  
**4-EXTREME        U-UNKNOWN    \*-NO INFORMATION**

**CORPORATE OFFICE: 113 Bloomingdale Road, Hicksville, NY 11801 (516) 932-3030 FAX: (516) 932-0014**

**Representation in the Continental United States, Hawaii and Puerto Rico • TOLL FREE: (800) 247-3973**

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**[www.cascadewater.com](http://www.cascadewater.com)**





# ACT

## ADVANCED CHEMICAL TECHNOLOGY

### SERVICE REPORT

Plant: <b>Sears- North Hollywood</b>	Date: <b>2-20-06</b>	Code:
Address: <b>12121 Victory Blvd.</b>	City, State: <b>North Hollywood</b>	Attention:

### Test Results

**Cooling Tower-**  
**System was not online at time of service. I filled the inhibitor tank.**  
**Chilled Loop-**  
**Inhibitor level is proper at this time.**

	Hard.	Alk.	Alk.	WATER ANALYSIS					Cooling Tower		Conductivity
SAMPLE	H	P	M		Cycl.	NaCl	pH	NaNO <sub>2</sub>	Inhib.		µmhos
Raw											400
Cooling Tower	Not	On	Line						8		1000
Chilled Loop							10.9	760			3300

### RECOMMENDED READINGS

	H	M									□mhos
Cooling Tower									2-3		
Chilled Loop							800+				

### INVENTORY

Product Number											
Inventory											
Recommended order											
Copy To: Log Book						Signed: <b>Chris Smith</b>					



**RECEIVED**  
*[Signature]*



ADVANCED CHEMICAL TECHNOLOGY

SERVICE REPORT

Plant: Sears- North Hollywood	Date: 1-23-06	Code:
Address: 12121 Victory Blvd.	City, State: North Hollywood	Attention:

Test Results

Cooling Tower-

Good overall control. I added biocide to the tower delivered 531 and amber guard to chiller room.

Chilled Loop-

Inhibitor level is proper at this time.

	Hard.	Alk.	Alk.	WATER ANALYSIS						Cooling Tower		Conductivity
SAMPLE	H	P	M		Cycl.	NaCl	pH	NaNO <sub>2</sub> .		Inhib.		µmhos
Raw										2		400
Cooling Tower										6		1200
Chilled Loop								700				3500

RECOMMENDED READINGS

	H	M									µmhos
Cooling Tower										5-7	
Chilled Loop							800+				

INVENTORY

Product Number											
Inventory											
Recommended order											
Copy To:					Signed: Chris Smith						



1/25/06



ADVANCED CHEMICAL TECHNOLOGY

SERVICE REPORT

Plant: Sears- North Hollywood	Date: 12-19-05	Code:
Address: 12121 Victory Blvd.	City, State: North Hollywood	Attention:

Test Results

Cooling Tower-

Good overall control. I added biocide to the tower and will switch treatment from previous vendors to ACT531 next service.

Chilled Loop-

Inhibitor level is proper at this time.

	Hard.	Alk.	Alk.	WATER ANALYSIS						Cooling Tower		Conductivity
SAMPLE	H	P	M		Cycl.	NaCl	pH	NaNO <sub>2</sub>		Inhib.		µmhos
Raw										2		400
Cooling Tower										7		1100
Chilled Loop								700				3200

RECOMMENDED READINGS

	H	M									µmhos
Cooling Tower										5-7	
Chilled Loop							800+				

INVENTORY

Product Number											
Inventory											
Recommended order											
Copy To:	Signed: Chris Smith										



12/21/05



ADVANCED CHEMICAL TECHNOLOGY

SERVICE REPORT

Plant: Sears- North Hollywood	Date: 11/15/05	Code:
Address: 12121 Victory Blvd.	City, State: North Hollywood	Attention:

Test Results

Cooling Tower-

I made routine adjustments to controller and added biocide to the tower.

Chilled Loop-

Inhibitor level is proper at this time.

	Hard.	Alk.	Alk.	WATER ANALYSIS					Cooling Tower		Conductivity
SAMPLE	H	P	M		Cycl.	NaCl	pH	NaNO <sub>3</sub>	Inhib.		µmhos
Raw									4		380
Cooling Tower									11		1650
Chilled Loop								800			1217

RECOMMENDED READINGS

	H	M								µmhos
Cooling Tower									3-4 over raw	
Chilled Loop							800+			

INVENTORY

Product Number										
Inventory										
Recommended order										
Copy To:	Signed: Chris Smith									



11/16/05





# ADVANCED CHEMICAL TECHNOLOGY

## SERVICE REPORT

<b>Plant:</b> Sears (North Hollywood)	<b>Date:</b> September 30, 2005	<b>Code:</b> SE??? <i>SEANH</i>
<b>Address:</b> 12121 Victory Blvd.	<b>City, State:</b> North Hollywood, CA	<b>Attention:</b> Mike Crippen

### Test Results

**Cooling tower:** Initially found the probe/bleed line throttled back about one-third from full open. With the current bleed line plumbing, this caused robbing of the probe flow as the bleed line is first upstream and essentially a straight shot into the drain. This resulted in rapid cycling of the flow sensor and bleed solenoid—not the optimal mode of operation!

Made the appropriate adjustments; informed Jeff (on-site PMT) who is very much on top of water treatment routine issues—good job, Jeff!


	Hard.	Alk.	Alk.	WATER ANALYSIS						Cooling Tower		Conductivity
<i>SAMPLE</i>	H	P	M		Cycl.	NaCl	pH	NaNO <sub>2</sub>		Inhib.		µmhos
Raw										2		400
Cooling tower										7		2000

### RECOMMENDED READINGS

	H	M					NaNO <sub>2</sub>				µmhos
Cooling tower	1400	600							5-7		1600
Chill loop							800 min				

### INVENTORY

Product Number											
Inventory											
Recommended order											
Copy To:	Signed: Steve Schaut										

 10/3/05

VICTORY BLVD  
NORTH HOLLYWOOD

**113 Bloomingdale Road  
Hicksville, NY 11801  
(800) 247-3973**

## Time Out

06	1	22	1	1
12	:	45	:	
	:		:	

PM  
PM

08520

Work Order #

EDGAR CUVIAN (619) 753-6792 QMT 2 KAREN ALFONSO

[illegible]

	Recommended Limits Min-Max	1200	9.0		2450		2450		5-15		
--	-------------------------------	------	-----	--	------	--	------	--	------	--	--

Chemicals	Added	On Site	Special Instructions	CoC	Equipment Status	SYSTEM CONDITIONS
C-876L	0	1		4.6	<input checked="" type="radio"/> On <input type="radio"/> Off	1 Satisfactory 2 Treatment High / Adjusted 3 Treatment Low / Adjusted 4 Bleed High / Adjusted 5 Bleed Low / Adjusted 6 System Dirty Needs Cleaning 7 Treated Water Loss 8 Steam / Condensate Loss 9 SER 0 See Comment Below
B-909L	5	1			<input type="radio"/> On <input type="radio"/> Off	
					<input type="radio"/> On <input type="radio"/> Off	Comments: (if additional space is required use form C-521)
					<input type="radio"/> On <input type="radio"/> Off	NEEDS NEW EQUIP. upgrade.
					<input type="radio"/> On <input type="radio"/> Off	NEW cooling tower.
			NEEDS NEW ORIGIN ON PTFE		<input checked="" type="radio"/> On <input type="radio"/> Off	
			to stop leakage when circulating		<input type="radio"/> On <input type="radio"/> Off	
			not similar to chiller circulation		<input type="radio"/> On <input type="radio"/> Off	

[illegible]Service Rep  
Signature

James M. M. M.

**Customer  
Signature**

Site#: 15693-036  
Cust Name: SEARS, ROEBUCK AND CO. Facilit  
Site Name: SEARS STORE #1168  
Site Addr: 12121 VICTORY BLVD  
N.HOLLYWOOD CA 91606

Contact:  
Phone:  
Monthly Report:  
Receipt Job: Y

Tech ID: ROS  
Call Date: 05/02/11  
Route#: 91606  
Page: 1

# CASCADE WATER SERVICES

113 Bloomingdale Road  
Hicksville, NY 11801  
(800) 247-3973

Srv Date

Time In

Time Out

05	124	11	
9	40		

☒ AM  
☐ PM

60530

Work Order #

964135

Cooling Tower	Call Slip	Location	Conductivity <input type="radio"/> TDS <input type="radio"/>		pH	Alkalinity		Chloride	Calcium Hardness	Total Hardness		SC
						P	Total					
Make Up>			612		7.9	0	90	50	110		2	
CT 1 1889153 ROOF			1375		8.8	30	230	120	270		8	1
Recommended Limits Min-Max			<1500		<9.0	<450		<450		<15		

Chemicals	Added	On Site	Special Instructions	CoC	Equipment Status	SYSTEM CONDITIONS	
S909L	0	7	WAS BLEED LINE VALVED OFF OR	2.4	CT 1	<input checked="" type="radio"/> On <input type="radio"/> Off	1 Satisfactory
C876L	1	1	UNPLUGGED ON ARRIVAL? Y N			<input type="radio"/> On <input type="radio"/> Off	2 Treatment High / Adjusted
			DID THE CONTROLLER HAVE POWER?			<input type="radio"/> On <input type="radio"/> Off	3 Treatment Low / Adjusted
			YES NO			<input type="radio"/> On <input type="radio"/> Off	4 Bleed High / Adjusted
			* Need pot feeder		CWS	<input type="radio"/> On <input type="radio"/> Off	5 Bleed Low / Adjusted
			Seal fix ASAP			<input type="radio"/> On <input type="radio"/> Off	6 System Dirty Needs Cleaning
			* Need upgraded Controller			<input type="radio"/> On <input type="radio"/> Off	7 Treated Water Loss
						Comments: (if additional space is required use form C-521)	
						CT-1 Test is @ correct levels. check probe, flow switch. chemical drum = Good	
						CWS- Nitrite levels high, due to cant open valve - Seal leak	

System	Call Slip	Location	Conductivity <input type="radio"/> TDS <input type="radio"/>		pH	Alkalinity		Chloride	Total Hardness	Nitrite	SC
						P	Total				
CWS 1889154 MER			1761		10.3					1000+	0
Recommended Limits Min-Max			1000-3000		9.5-10.5					500-1000	

Service Rep Signature

Brian Zell

Customer Signature

left copy in Book

ce#: 15693-036  
Cust Name: SEARS, ROEBUCK AND CO. Facilit  
Site Name: SEARS STORE #1168  
Site Addr: 12121 VICTORY BLVD  
N.HOLLYWOOD CA 91606

Contact:  
Phone:  
Monthly Report:  
Receipt Job: Y

Tech ID: ROS  
Call Date: 04/01/11  
Route#: 91606  
Page: 1

# CASCADE WATER SERVICES

113 Bloomingdale Road  
Hicksville, NY 11801  
(800) 247-3973

Srv Date

Time In

Time Out

04	1	22	1	1
7	:	45		
			PM	AM

Work Order #

957071

60530

Cooling Tower	Call Slip	Location	Conductivity TDS	pH	Alkalinity		Chloride	Calcium Hardness	Total Hardness		SC
					P	Total					
Make Up>			534	7.8		0100	60	130		2	
CT 1 1874643 ROOF			1208	8.8		30210	120	240		8	
Recommended Limits Min-Max			<1500	<9.0		<450		<450			

Chemicals	Added	On Site	Special Instructions	CoC	Equipment Status	SYSTEM CONDITIONS	
909L	1	1	0	2.0	CT 1	<input type="radio"/> On <input checked="" type="radio"/> Off	1 Satisfactory 2 Treatment High / Adjusted 3 Treatment Low / Adjusted 4 Bleed High / Adjusted 5 Bleed Low / Adjusted
1876L	1	1	0			<input type="radio"/> On <input type="radio"/> Off	6 System Dirty Needs Cleaning 7 Treated Water Loss 8 Steam / Condensate Loss 9 SER 0 See Comment Below
			DID THE CONTROLLER HAVE POWER? YES NO			<input type="radio"/> On <input type="radio"/> Off	Comments: (if additional space is required use form C-521)
			* pot feeder has leak issues. Need to be looked @ ASAP		CWS	<input type="radio"/> On <input checked="" type="radio"/> Off	CT-1 Test is @ correct level check probe, Flow Switch, Solenoid. Refill chemical drum CWS- Nitrite levels high, due to cant open Valve because of sea
						<input type="radio"/> On <input type="radio"/> Off	
						<input type="radio"/> On <input type="radio"/> Off	

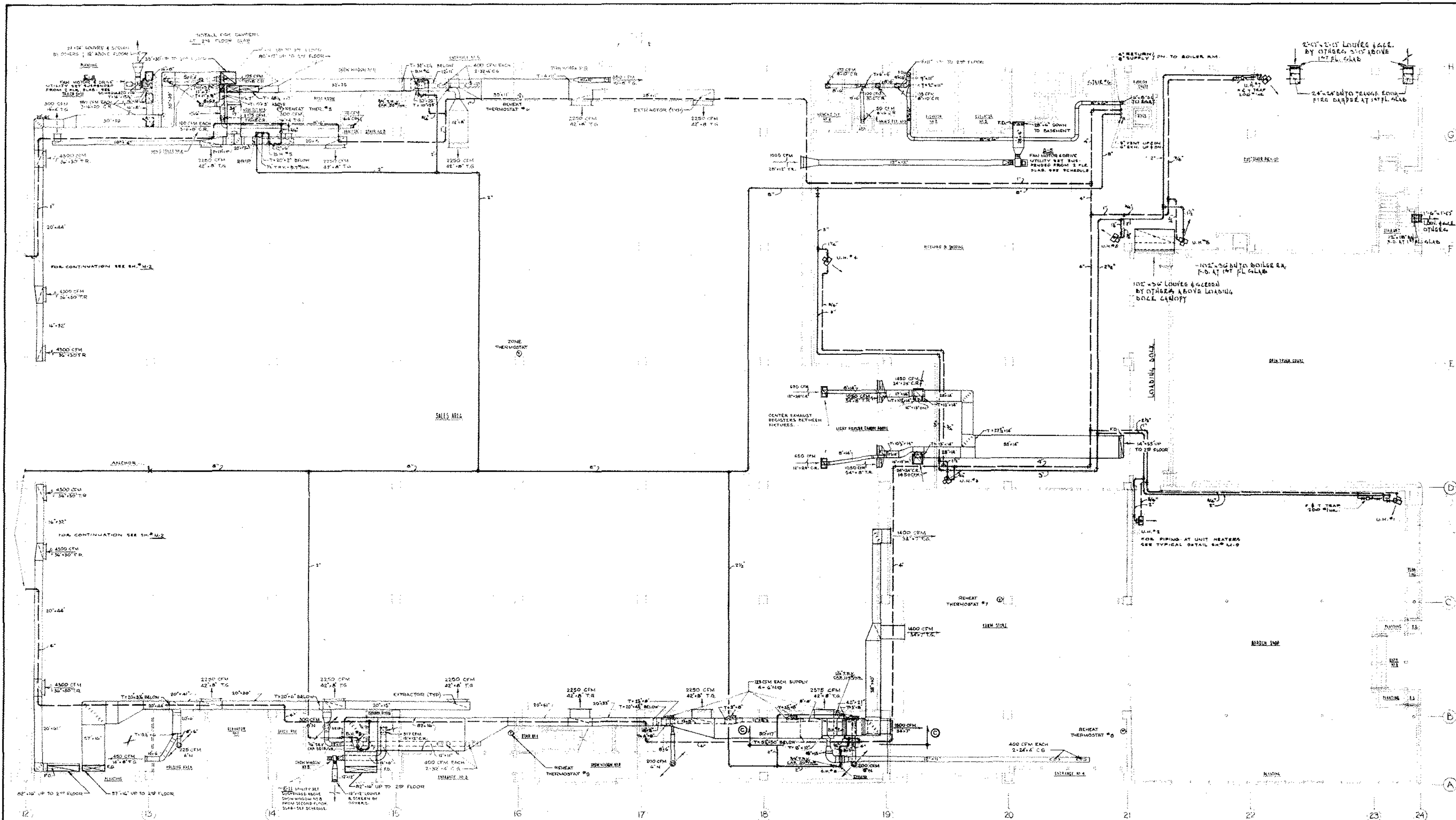
System	Call Slip	Location	Conductivity TDS	pH	Alkalinity		Chloride	Total Hardness	Nitrite	SC
					P	Total				
CWS 1874644 MER			1361	10.3					1000+	0
Recommended Limits Min-Max			1000-3000	9.5-10.5				500-1000		

Service Rep  
Signature

Brian Hill

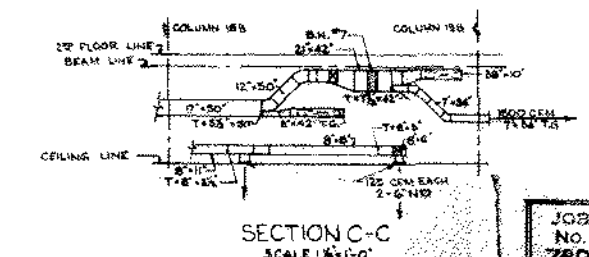
Customer  
Signature





**UNIT HEATER SCHEDULE**

U.H. NO.	LOCATION	TRANS. NO.	BTU/HK.	COMP. #1 HR.	C.P.M. TYP. AIR	OUTLET VELOCITY	MOTOR H.P.	MOTOR R.P.M.	VOLTS	PHASE
1	GARDEN SHOP	80 H	78,000	81.0	983	678	1/20	1500	120	1-Ø
2	"	80 H	78,000	81.0	983	678	1/20	1500	120	1-Ø
3	AREA 2	76 H	51,000	55.0	648	702	1/20	1500	120	1-Ø
4	"	72 H	38,000	37.0	511	702	1/20	1500	120	1-Ø
5	"	72 H	38,000	37.0	511	702	1/20	1500	120	1-Ø
6	CUSTOMER PICK-UP	70 H	60,000	65.0	716	508	1/20	1500	120	1-Ø
7	"	74 H	42,000	46.0	587	811	1/20	1500	120	1-Ø



**GENERAL NOTES**  
 ALL TRAPS AT UNIT HEATERS & BOOSTER HEATERS TO BE FLOAT & THERMOSTATIC TYPE. CAP. 200 LB./IN.

JOB NO. 769  
 RALPH E. PHILLIPS  
 MECHANICAL & ELECTRICAL ENGINEER  
 600 ST. PAUL AVENUE  
 LOS ANGELES 14, CALIFORNIA

**FIRST FLOOR PLAN - NORTH HALF**  
 DRAWN BY: [Signature]  
 CHECKED BY: [Signature]  
 DATE: 1-24-50  
**ELECTRONIC CONTROL #**  
 RH6B 162 M3

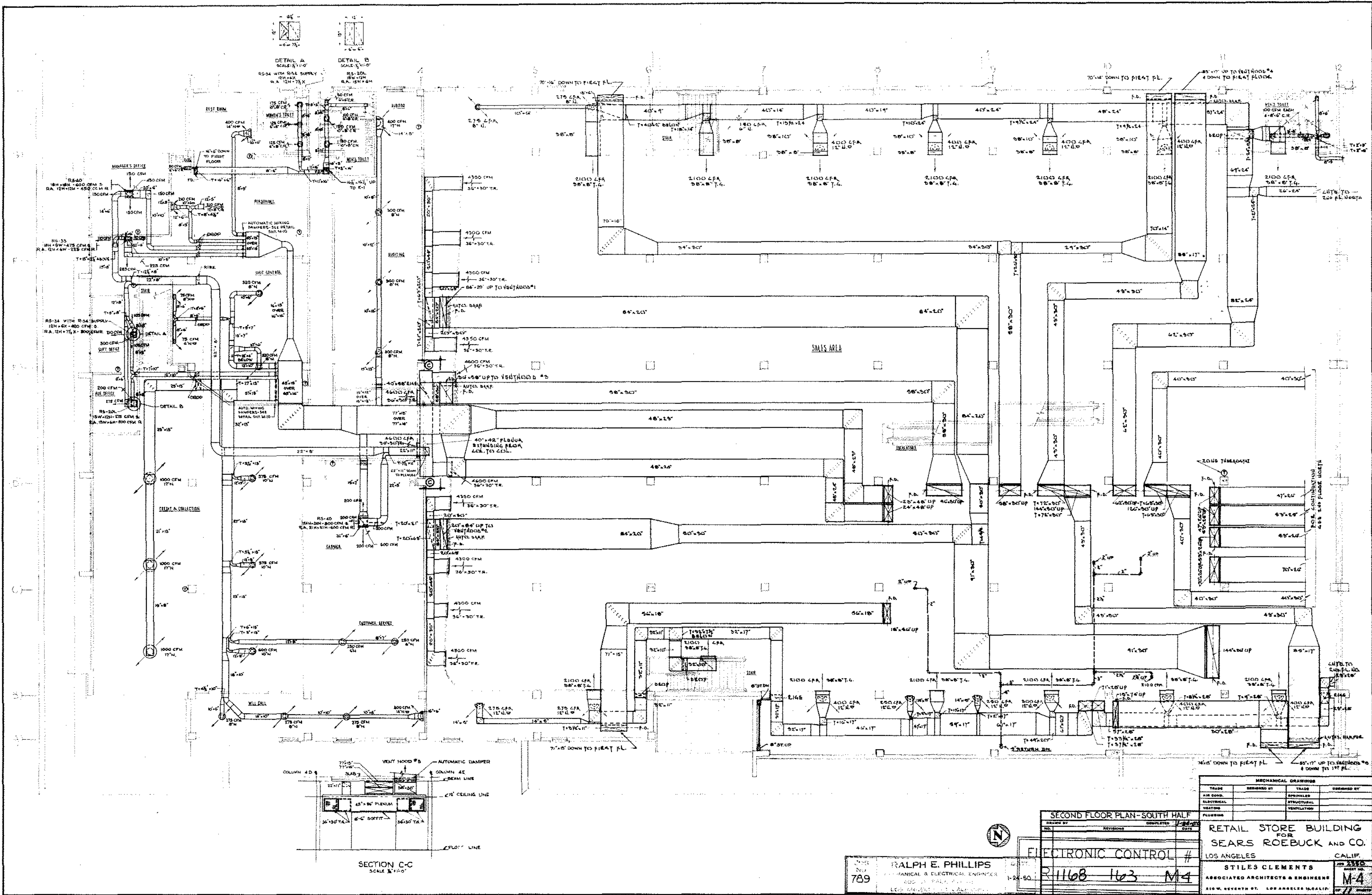
MECHANICAL DRAWINGS			
TRADE	DESIGNED BY	TRADE	DESIGNED BY
AIR COND.		PLUMBING	
ELECTRICAL		STRUCTURAL	
HEATING		VENTILATION	
PLUMBING			

**RETAIL STORE BUILDING FOR SEARS ROEBUCK AND CO. LOS ANGELES CALIF.**

**STILES CLEMENTS ASSOCIATED ARCHITECTS & ENGINEERS**

210 W. SEVENTH ST. LOS ANGELES 10, CALIF.

JOB NO. 769  
 SHEET NO. M3



SECTION C-C  
SCALE 1/4" = 1'-0"

SECOND FLOOR PLAN-SOUTH HALF

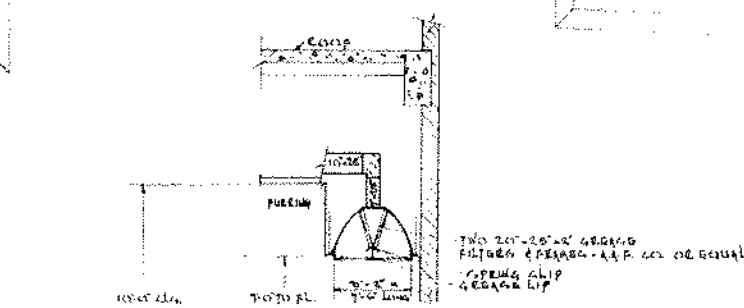
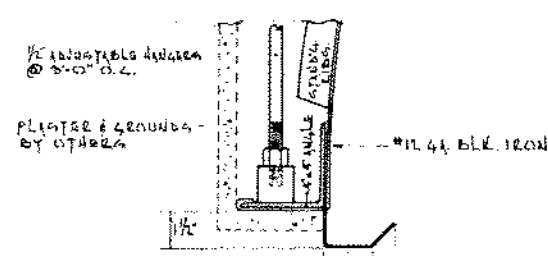
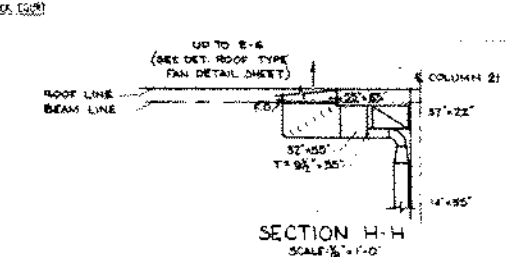
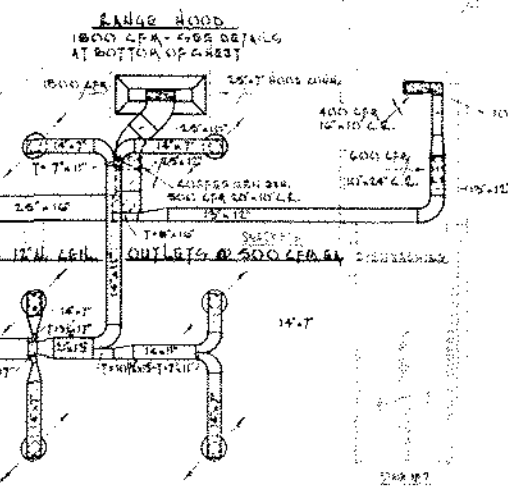
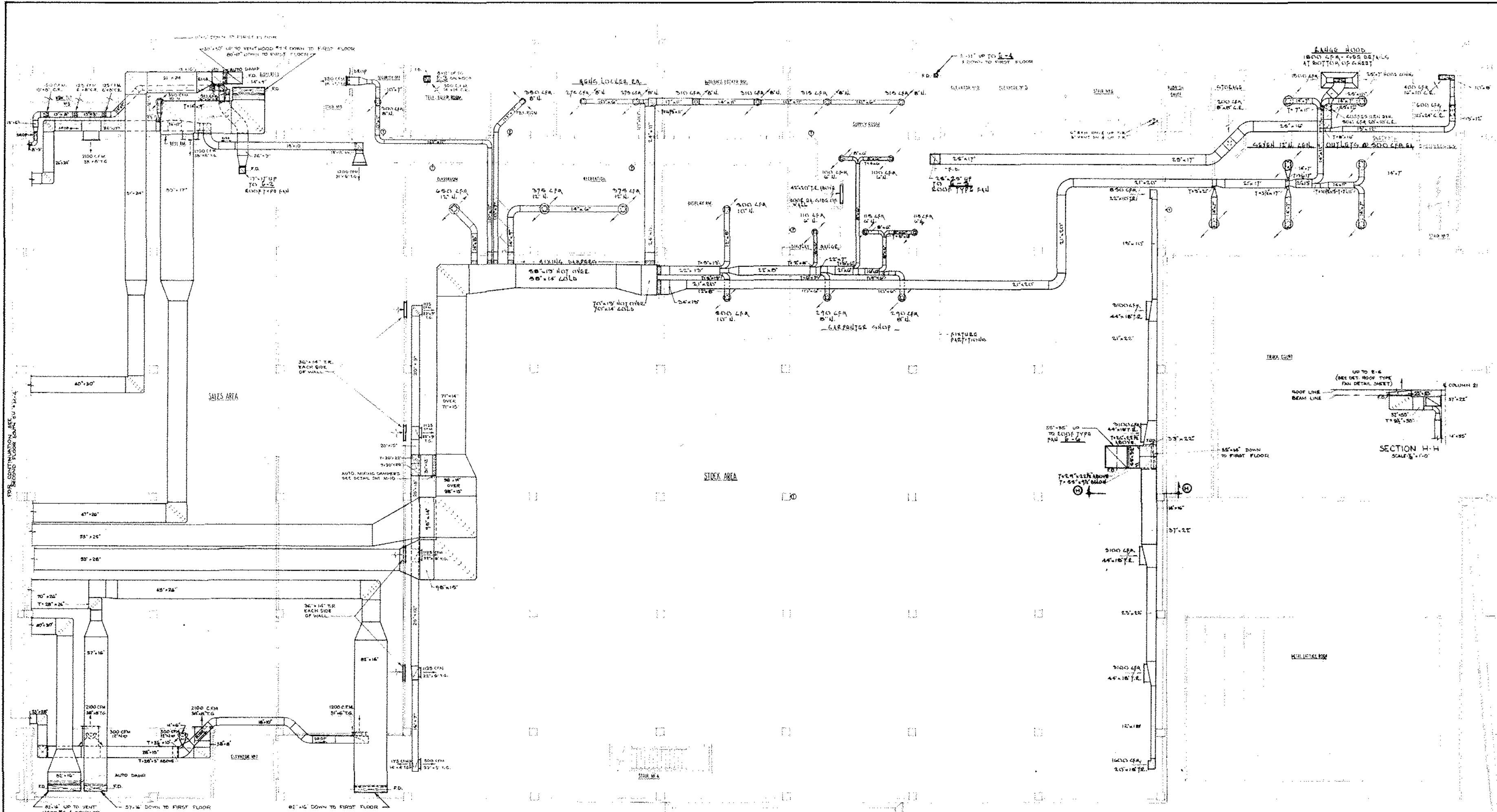
NO.	REVISION	DATE
1	AS SHOWN	1-24-50

MECHANICAL DRAWINGS			
TRADE	DESIGNED BY	TRADE	DESIGNED BY
AIR COND.	PHILLIPS	MECHANICAL	PHILLIPS
ELECTRICAL	PHILLIPS	ELECTRICAL	PHILLIPS
HEATING	PHILLIPS	HEATING	PHILLIPS
PLUMBING	PHILLIPS	PLUMBING	PHILLIPS

789 RALPH E. PHILLIPS  
MECHANICAL & ELECTRICAL ENGINEER  
1-24-50

ELECTRONIC CONTROL #  
R11608 163 M4

RETAIL STORE BUILDING  
FOR  
SEARS ROEBUCK AND CO.  
LOS ANGELES CALIF.  
STILES CLEMENTS  
ASSOCIATED ARCHITECTS & ENGINEERS  
210 W. SEVENTH ST. LOS ANGELES 10, CALIF.



ELECTRONIC CONTROL #  
R1168 164 M5

SECOND FLOOR PLAN-NORTH HALF			
NO.	REVISIONS	DATE	BY

MECHANICAL DRAWINGS			
TRADE	DESIGNED BY	TRADE	DESIGNED BY
AIR COND.		SPRINKLER	
ELECTRICAL		STRUCTURAL	
HEATING		VENTILATION	
PLUMBING			

RETAIL STORE BUILDING FOR SEARS ROEBUCK AND CO. LOS ANGELES, CALIF.	
STILES CLEMENTS ASSOCIATED ARCHITECTS & ENGINEERS 210 W. SEVENTH ST., LOS ANGELES 10, CALIF.	JOB NO. 789 DATE 1-24-50 SHEET NO. M-5 OF 77 SHEETS

May 23, 2002

Ms. Jennifer Jones  
Project Manager  
California Environmental Protection Agency  
Department of Toxic Substances Control  
Southern California Region  
1011 North Grandview Avenue  
Glendale, CA 91201

Subject: Focused Soils Investigation Technical Memorandum  
Proposed East Valley Middle School No. 1  
Hamlin Street and Laurel Canyon Boulevard  
Los Angeles, California

Telephone

562-951-2000

Dear Ms. Jones:

Facsimile

Earth Tech Inc. (Earth Tech), on behalf of the Los Angeles Unified School District (LAUSD), is submitting this technical memorandum describing the focused soils investigation (FSI) conducted at the above referenced site (Site) (Figure 1). The FSI was conducted in accordance with recommendations presented in the Preliminary Environmental Assessment (PEA) submitted to the Department of Toxic Substances Control (DTSC) on March 11, 2002 and revised on May 7, 2002.

The primary recommendation provided in the PEA was to conduct a FSI in the vicinity of one soil boring (SB-21), where elevated concentrations of polycyclic aromatic hydrocarbons (PAHs) were detected at 0.5 feet below ground surface (bgs). The purpose of the FSI was to delineate the lateral and vertical extent of soil impacted with PAHs, which would allow for better assessment of potential effects to human health risk and remedial decision-making.

This memorandum presents the results of the FSI conducted in the vicinity of soil boring SB-21, conclusions and recommendations. Upon approval of this memorandum, Earth Tech and LAUSD will prepare a Remedial Action Work Plan (RAW), which will present the proposed remedial action to mitigate the elevated PAHs detected in the vicinity soil boring SB-21.

#### **SITE DESCRIPTION**

The Site consists of approximately 10-acres and is currently occupied by two commercial buildings (Valley Plaza) and one auto service center (Sears Auto Service Center). The remainder of the site consists of paved parking lots and a public access road (Bellingham Avenue). Single-family residences occupy the area northwest of the Site. Commercial properties occupy the area north, northeast, east and south of the Site. Valley Plaza Community Center and Park is located west of the Site.





## **PERTINENT PEA RESULTS AND CONCLUSIONS**

Results of the PEA indicated the following:

- Of the 79 soil samples analyzed for semi-volatile organic compounds (SVOCs), one soil sample (SB-21-0.5), near a former underground hoist) had detectable concentrations of 12 SVOCs, all of which are PAHs. The PAHs detected are considered to be chemicals of potential concern (COPC).
- Of the 10 soil samples analyzed for pesticides, four samples showed detectable concentrations of one to three separate pesticides. All pesticides detected are considered to be COPCs.
- All of the 17 Title 22 metals were detected across the site with the exception of Thallium. However, based on a comparison of the site average concentrations of these metals and their respective maximum background concentrations, none of the detected metals were determined to be COPCs.
- Total petroleum hydrocarbons (TPH) were detected at low to trace concentrations in one boring (SB-6) at five and nine feet bgs. The concentrations of TPH detected are not considered to be a concern.
- PCBs were not detected at the site.
- A total of 30 chemicals were identified as COPCs in soil and soil gas at the site. These COPCs were evaluated in the human health screening evaluation. Using maximum COPC concentrations detected at the site, a total incremental cancer risk for hypothetical residential exposure to soil through direct contact (including incidental ingestion, dermal contact and inhalation of dust particles) was estimated to be 8E-04. The chemicals that contributed to more than 99.9 percent of the estimated incremental cancer risk were the PAHs detected in soil sample SB-21-0.5. If the PAHs data from SB-21-0.5 were removed, the total site cancer risk would be less than the cancer risk criterion of 1E-6.

Accordingly, the PEA recommended further action in the form of a FSI to delineate the lateral and vertical extent of PAH impacted soil that would pose an unacceptable risk in the vicinity of soil boring SB-21. The PEA made no other recommendations for additional assessment.

### **PEA Investigation at Soil Boring SB-21**

Soil boring SB-21 is located adjacent to a former underground hydraulic hoist. A concrete patch exists where the hoist was located and where the hydraulic line extended underground to the remote lift actuation lever (attached Figure). PAHs were detected in one sample collected at 0.5 feet bgs (SB-21-0.5). When drilling at SB-21 during the PEA investigation, an obstruction was encountered at approximately 3 feet bgs. Boring SB-21 was moved approximately three feet away, advanced to the total depth of 12-feet bgs (SB-21A) and



samples collected at 7, 10 and 12 feet bgs. The 7-foot sample (SB-21-7) was analyzed for SVOCs according to EPA method 8270 in addition to other parameters presented in the PEA report. The 10 and 12-foot samples were held pending the analytical results, according to the PEA work plan. The analytical result for sample SB-21-7 was non-detect at the laboratory detection limits.

### **FOCUSED SOILS INVESTIGATION**

Based on the results of soil sample SB-21-0.5, and in the interest of time, conducting step-out borings and collecting soil samples in the vicinity of borings SB-21 was discussed with Earth Tech, LAUSD and the DTSC project manager on February 13 and 14, 2002. It was agreed by all parties that while the drilling equipment and geologists were on site, a FSI should be conducted around boring SB-21 (one round of step-out borings and collecting soil samples).

The FSI was conducted on February 15, 2002 in the vicinity of soil boring SB-21. Seven soil borings were installed, SB-35 through SB-42 (attached Figure) as part of the focused soils investigation. Soil boring SB-35 was placed adjacent to soil boring SB-21 and advanced to 3 feet bgs. Soil samples were collected for analyses at 1 and 3 feet (bgs). At three feet bgs, an obstruction caused refusal, similar to boring SB-21. The obstruction is limited in lateral extent as all borings drilled at three feet from S-21 and SB-35 did not encounter the obstruction.

Soil borings SB-36 through SB-39 were located at approximately a 3-foot distance in a circular patten surrounding boring SB-21 (attached Figure). These borings were drilled to a maximum depth of 12 feet bgs and soil samples were collected at 1, 3, 5, 7, 10 and 12 feet bgs. Soil samples collected at 1, 3, 5 and 7 feet bgs were submitted to the laboratory for analyses, samples collected at 10 and 12 feet bgs were held pending the analytical results. Borings SB-37 and SB-36 were also located approximately 1 and 2-feet, respectively, from a concrete patch, where the former underground hydraulic line extended to the remote lift actuation lever (attached Figure).

Soil borings SB40 through SB-43 were located at approximately a 10-foot distance surrounding boring SB-21. These borings were also drilled to a maximum depth of 12 feet bgs and soil samples collected at 1, 3, 5, 7, 10 and 12 feet bgs. All soil samples from these borings were held pending the analytical results of the inner ring of samples.

### **Analytical Results**

All FSI soil samples submitted for analyses were analyzed for SVOCs according to EPA method 8270. Analytical results of the focused investigation show detectable concentrations of three SVOCs in sample SB-35-1, which was collected at 1-foot bgs adjacent to soil boring SB-21. All were flagged as detected below the reporting limit but above the detection limit. Only one of the three SVOCs is a PAH and was detected in sample SB-21-0.5. All other results are non-detect at the laboratory detection limit. The attached table presents a summary of the analytical results from borings PEA boring SB-21

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and FSI borings SB-35 through SB-39. The laboratory report for samples SB-35 through SB-39 is also attached.

## **CONCLUSIONS and RECOMMENDATIONS**

The following are our conclusions of the focused investigation:

- PAHs were detected at 0.5 and 1-foot bgs, in two borings drilled approximately 1-foot from each other (SB-21 and SB-35).
- All other FSI samples submitted for analyses were non-detect at the laboratory detection limit, including samples SB-36 and SB-37, collected adjacent to the underground trace of the hydraulic remote actuation lever line.
- Based on the analytical results and findings presented in this technical memorandum the extent of PAH and SVOC impacted soil has been adequately delineated and appears to be limited to less than 3-feet surrounding boring SB-21 and to a maximum depth of 3-feet bgs.
- The estimated volume of PAH and SVOC impacted soil is approximately 3 cubic yards or 4.5 tons.

Based on this data, Earth Tech concludes that Further Action is necessary and recommends that a RAW be prepared to address the removal of PAH and SVOC impacted soil.

If you have any questions or require further discussion, please contact Steve Williams at 562-951-2272 or Chris Ingalls at 213-633-8309.

Sincerely,

Earth Tech,



Steve Williams R.G., CHG

Project Manager

cc: Chris Ingalls, LAUSD-OEHS



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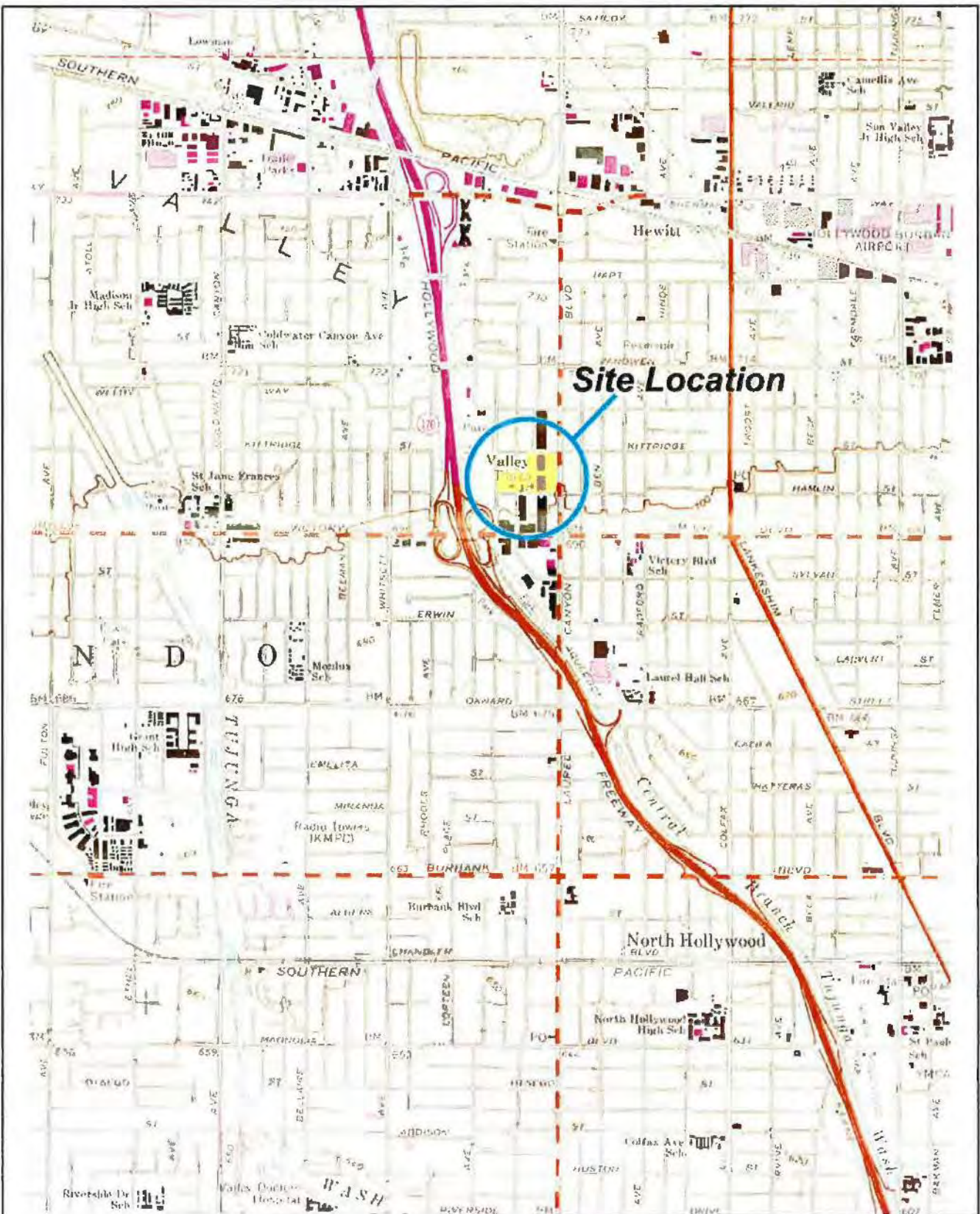
Attachments: Figure – Site Map  
Figure – Soil Boring and Step-Out Boring Map  
Table – Summary of Soil Analytical Results – SVOCs  
Laboratory Report



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**Site Location**

**Valley**



North  
Scale 1:24,000

### Site Location Map

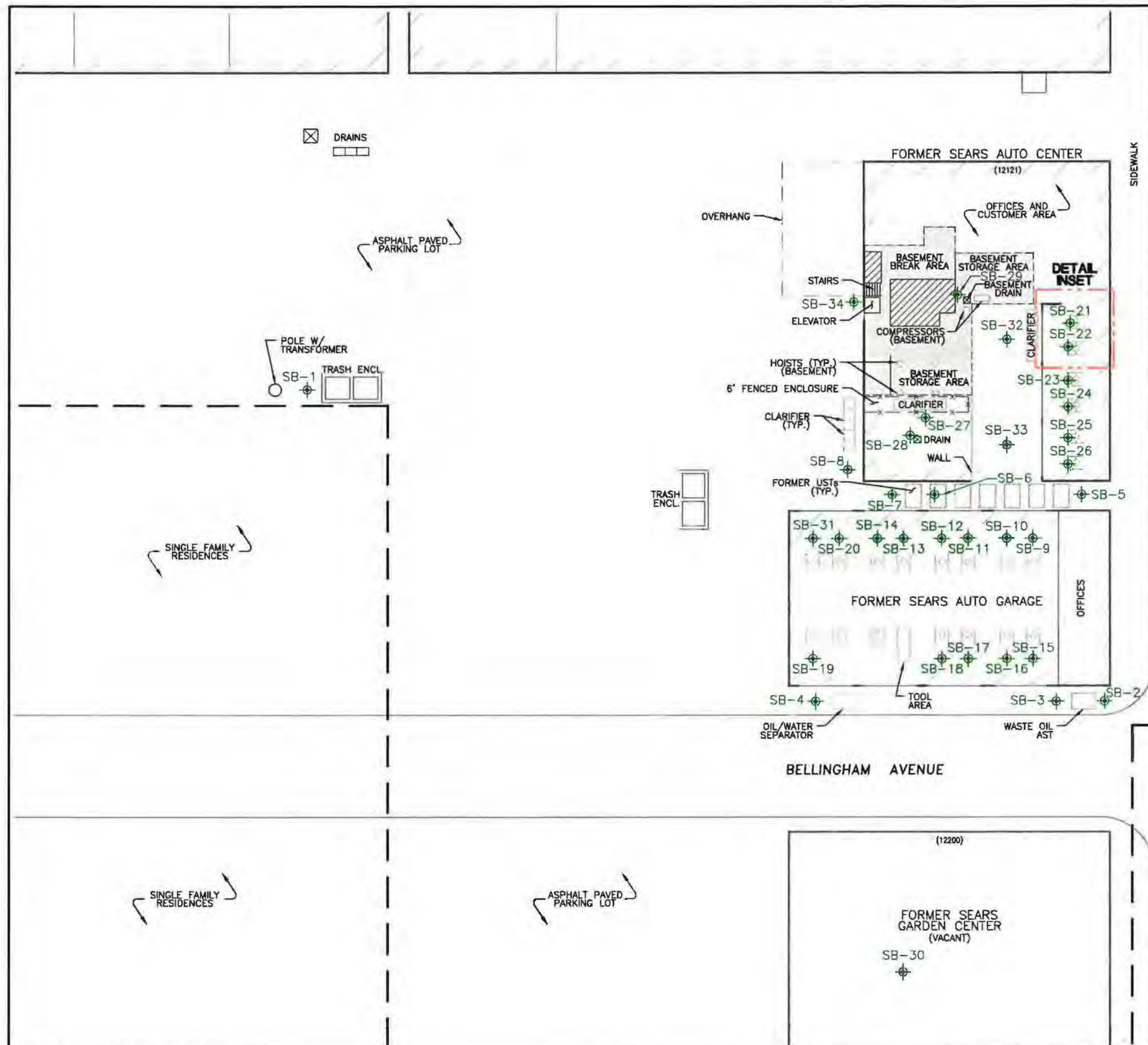
Date 3-02	LAUSD	Figure
Project No. 53306.06	 EARTH TECH <small>A tyco INTERNATIONAL LTD COMPANY</small>	1

53306.06 LAUSD

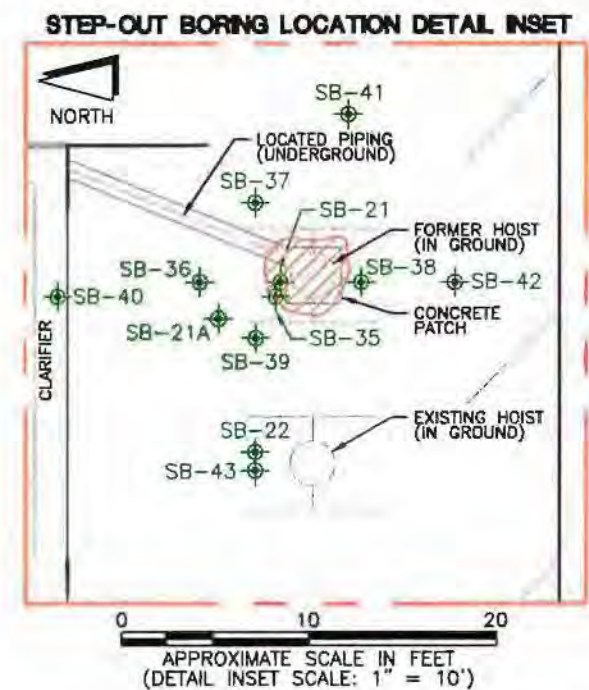
Source: USGS Topographic Map, 7.5' Series,  
Van Nuys, CA Quadangle







- EXPLANATION**
- PROPOSED SCHOOL BOUNDARY
  - FORMER UST LOCATION
  - ⊕ IN-GROUND HYDRAULIC LIFT
  - ⊕ ABOVE GROUND HYDRAULIC LIFT
  - ⊕ IN-GROUND HYDRAULIC LIFT (ABANDONED)
  - ▭ BASEMENT AREA
  - SB-34 ⊕ SOIL BORING LOCATION



- NOTES:**
- SOURCE: CALIFORNIA ENVIRONMENTAL, DATED JULY 2000.
  - FEATURES AND LOCATIONS ARE APPROXIMATE, NOT A SURVEYED MAP.

NORTH  
 0 40 80  
 APPROXIMATE SCALE IN FEET

EAST VALLEY MIDDLE SCHOOL  
 LOS ANGELES, CA  
**SOIL BORING AND STEP-OUT BORING LOCATION MAP**  
 LOS ANGELES UNIFIED SCHOOL DISTRICT  
 LOS ANGELES, CA

DATE: 02-02	EARTH  TECH	FIGURE
PROJECT NO. 53306		4



Table 1  
Summary of Soil Analytical Data - SVOCs  
Step Out Borings  
Proposed East Valley Middle School No. 1

Sample Identification		SB-21-0.5	SB-21-0.5-R	SB-21-0.5-H	SB-21-7	SB-35-1	SB-35-3	SB-36-1	SB-36-3
Date Sampled		1/25/2002	1/25/2002	1/25/2002	1/28/2002	2/15/2002	2/15/2002	2/15/2002	2/15/2002
Depth (feet below ground surface)		0.5	0.5	0.5	7	1	3	1	3
MDL		Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C									
Semi-Volatile Organics									
	Unit								
N-Nitrosodimethylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Aniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Phenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethyl) Ether	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroisopropyl) Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
3/4-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
Isophorone	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethoxy) Methane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Naphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Hexachloro-1,3-Butadiene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	mg/kg	1.5	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Dimethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND

Table 1  
Summary of Soil Analytical Data - SVOCs  
Step Out Borings  
Proposed East Valley Middle School No. 1

Sample Identification		SB-21-0.5	SB-21-0.5-R	SB-21-0.5-H	SB-21-7	SB-35-1	SB-35-3	SB-36-1	SB-36-3
Date Sampled		1/25/2002	1/25/2002	1/25/2002	1/28/2002	2/15/2002	2/15/2002	2/15/2002	2/15/2002
Depth (feet below ground surface)		0.5	0.5	0.5	7	1	3	1	3
		MDL	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C									
Semi-Volatile Organics(cont.)	Unit								
4-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Diethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Fluorene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Azobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-Methylphenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	mg/kg	0.4	1.1	0.42	1.6	0.12	ND	ND	ND
Anthracene	mg/kg	0.4	0.32J	0.13J	0.54	ND	ND	ND	ND
Di-n-Butyl Phthalate	mg/kg	0.5	ND	ND	ND	0.15	ND	ND	ND
Fluoranthene	mg/kg	0.4	9.5	3.3	14	ND	ND	ND	ND
Benzidine	mg/kg	10	ND	ND	ND	ND	ND	ND	ND
Pyrene	mg/kg	0.4	8.5	3.4	14	ND	ND	ND	ND
Pyridine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Butyl Benzyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Anthracene	mg/kg	0.4	8.2	3.0	13	ND	ND	ND	ND
Bis(2-Ethylhexyl) Phthalate	mg/kg	0.5	ND	ND	ND	0.22	ND	ND	ND
Chrysene	mg/kg	0.4	8.1	2.9	13	ND	ND	ND	ND
Di-n-Octyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzo (k) Fluoranthene	mg/kg	0.4	7.5	2.6	11	ND	ND	ND	ND
Benzo (b) Fluoranthene	mg/kg	0.4	7.4	2.8	12	ND	ND	ND	ND
Benzo (a) Pyrene	mg/kg	0.35	7.5	2.7	12	ND	ND	ND	ND
Indeno (1,2,3-c,d) Pyrene	mg/kg	0.4	2.6	1.2	4.7	ND	ND	ND	ND
Dibenz (a,h) Anthracene	mg/kg	0.4	0.82	0.42	1.6	ND	ND	ND	ND
Benzo (g,h,i) Perylene	mg/kg	0.4	2.2	1.0	4.2	ND	ND	ND	ND

Table 1  
Summary of Soil Analytical Data - SVOCs  
Step Out Borings  
Proposed East Valley Middle School No. 1

Sample Identification		SB-36-5	SB-36-7	SB-37-1	SB-37-3	SB-38-1	SB-38-3	SB-38-5	SB-38-7
Date Sampled		2/15/2002	2/15/2002	2/15/2002	2/15/2002	2/15/2002	2/15/2002	2/15/2002	2/15/2002
Depth (feet below ground surface)		5	7	1	3	1	3	5	7
MDL		Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C									
Semi-Volatile Organics									
	Unit								
N-Nitrosodimethylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Aniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Phenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethyl) Ether	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroisopropyl) Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
3/4-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
Isophorone	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethoxy) Methane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Naphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Hexachloro-1,3-Butadiene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	mg/kg	1.5	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Dimethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND

Table 1  
Summary of Soil Analytical Data - SVOCs  
Step Out Borings  
Proposed East Valley Middle School No. 1

Sample Identification		SB-36-5	SB-36-7	SB-37-1	SB-37-3	SB-38-1	SB-38-3	SB-38-5	SB-38-7
Date Sampled		2/15/2002	2/15/2002	2/15/2002	2/15/2002	2/15/2002	2/15/2002	2/15/2002	2/15/2002
Depth (feet below ground surface)		5	7	1	3	1	3	5	7
MDL		Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C									
Semi-Volatile Organics(cont.)	Unit								
4-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Diethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Fluorene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Azobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-Methylphenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Di-n-Butyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzidine	mg/kg	10	ND	ND	ND	ND	ND	ND	ND
Pyrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Pyridine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Butyl Benzyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Bis(2-Ethylhexyl) Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Chrysene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Di-n-Octyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzo (k) Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (b) Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Pyrene	mg/kg	0.35	ND	ND	ND	ND	ND	ND	ND
Indeno (1,2,3-c,d) Pyrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Dibenz (a,h) Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (g,h,i) Perylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND



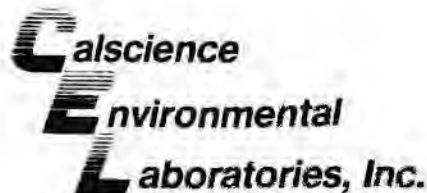
Table 1  
Summary of Soil Analytical Data - SVOCs  
Step Out Borings  
Proposed East Valley Middle School No. 1

Sample Identification		SB-39-1	SB-39-3	SB-39-5	SB-39-7
Date Sampled		2/15/2002	2/15/2002	2/15/2002	2/15/2002
Depth (feet below ground surface)		1	3	5	7
MDL		Conc.	Conc.	Conc.	Conc.
EPA 8270C	Unit				
Semi-Volatile Organics					
N-Nitrosodimethylamine	mg/kg	0.5	ND	ND	ND
Aniline	mg/kg	0.5	ND	ND	ND
Phenol	mg/kg	0.5	ND	ND	ND
Bis(2-Chloroethyl) Ether	mg/kg	2.5	ND	ND	ND
2-Chlorophenol	mg/kg	0.5	ND	ND	ND
1,3-Dichlorobenzene	mg/kg	0.5	ND	ND	ND
1,4-Dichlorobenzene	mg/kg	0.5	ND	ND	ND
Benzyl Alcohol	mg/kg	0.5	ND	ND	ND
1,2-Dichlorobenzene	mg/kg	0.5	ND	ND	ND
2-Methylphenol	mg/kg	0.5	ND	ND	ND
Bis(2-Chloroisopropyl) Ether	mg/kg	0.5	ND	ND	ND
3,4-Methylphenol	mg/kg	0.5	ND	ND	ND
N-Nitroso-di-n-propylamine	mg/kg	0.5	ND	ND	ND
Hexachloroethane	mg/kg	0.5	ND	ND	ND
Nitrobenzene	mg/kg	2.5	ND	ND	ND
Isophorone	mg/kg	0.5	ND	ND	ND
2-Nitrophenol	mg/kg	0.5	ND	ND	ND
2,4-Dimethylphenol	mg/kg	0.5	ND	ND	ND
Benzoic Acid	mg/kg	2.5	ND	ND	ND
Bis(2-Chloroethoxy) Methane	mg/kg	0.5	ND	ND	ND
2,4-Dichlorophenol	mg/kg	0.5	ND	ND	ND
1,2,4-Trichlorobenzene	mg/kg	0.5	ND	ND	ND
Naphthalene	mg/kg	0.4	ND	ND	ND
4-Chloroaniline	mg/kg	0.5	ND	ND	ND
Hexachloro-1,3-Butadiene	mg/kg	0.5	ND	ND	ND
4-Chloro-3-Methylphenol	mg/kg	0.5	ND	ND	ND
2-Methylnaphthalene	mg/kg	0.4	ND	ND	ND
1-Methylnaphthalene	mg/kg	0.4	ND	ND	ND
Hexachlorocyclopentadiene	mg/kg	1.5	ND	ND	ND
2,4,5-Trichlorophenol	mg/kg	0.5	ND	ND	ND
2-Chloronaphthalene	mg/kg	0.5	ND	ND	ND
2-Nitroaniline	mg/kg	0.5	ND	ND	ND
Dimethyl Phthalate	mg/kg	0.5	ND	ND	ND
Acenaphthylene	mg/kg	0.4	ND	ND	ND
3-Nitroaniline	mg/kg	0.5	ND	ND	ND
Acenaphthene	mg/kg	0.4	ND	ND	ND
2,4-Dinitrophenol	mg/kg	2.5	ND	ND	ND

Table 1  
Summary of Soil Analytical Data - SVOCs  
Step Out Borings  
Proposed East Valley Middle School No. 1

Sample Identification		SB-39-1	SB-39-3	SB-39-5	SB-39-7
Date Sampled		2/15/2002	2/15/2002	2/15/2002	2/15/2002
Depth (feet below ground surface)		1	3	5	7
MDL		Conc.	Conc.	Conc.	Conc.
EPA 8270C					
Semi-Volatile Organics(cont.)	Unit				
4-Nitrophenol	mg/kg	0.5	ND	ND	ND
Dibenzofuran	mg/kg	0.5	ND	ND	ND
2,4-Dinitrotoluene	mg/kg	0.5	ND	ND	ND
2,6-Dinitrotoluene	mg/kg	0.5	ND	ND	ND
Diethyl Phthalate	mg/kg	0.5	ND	ND	ND
4-Chlorophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND
Fluorene	mg/kg	0.4	ND	ND	ND
4-Nitroaniline	mg/kg	0.5	ND	ND	ND
Azobenzene	mg/kg	0.5	ND	ND	ND
4,6-Dinitro-2-Methylphenol	mg/kg	2.5	ND	ND	ND
N-Nitrosodiphenylamine	mg/kg	0.5	ND	ND	ND
2,4,6-Trichlorophenol	mg/kg	0.5	ND	ND	ND
4-Bromophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND
Hexachlorobenzene	mg/kg	0.5	ND	ND	ND
Pentachlorophenol	mg/kg	2.5	ND	ND	ND
Phenanthrene	mg/kg	0.4	ND	ND	ND
Anthracene	mg/kg	0.4	ND	ND	ND
Di-n-Butyl Phthalate	mg/kg	0.5	ND	ND	ND
Fluoranthene	mg/kg	0.4	ND	ND	ND
Benzidine	mg/kg	10	ND	ND	ND
Pyrene	mg/kg	0.4	ND	ND	ND
Pyridine	mg/kg	0.5	ND	ND	ND
Butyl Benzyl Phthalate	mg/kg	0.5	ND	ND	ND
3,3'-Dichlorobenzidine	mg/kg	0.5	ND	ND	ND
Benzo (a) Anthracene	mg/kg	0.4	ND	ND	ND
Bis(2-Ethylhexyl) Phthalate	mg/kg	0.5	ND	ND	ND
Chrysene	mg/kg	0.4	ND	ND	ND
Di-n-Octyl Phthalate	mg/kg	0.5	ND	ND	ND
Benzo (k) Fluoranthene	mg/kg	0.4	ND	ND	ND
Benzo (b) Fluoranthene	mg/kg	0.4	ND	ND	ND
Benzo (a) Pyrene	mg/kg	0.35	ND	ND	ND
Indeno (1,2,3-c,d) Pyrene	mg/kg	0.4	ND	ND	ND
Dibenz (a,h) Anthracene	mg/kg	0.4	ND	ND	ND
Benzo (g,h,i) Perylene	mg/kg	0.4	ND	ND	ND





February 25, 2002  
PM09002

Steve Williams  
Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Subject: Calscience Work Order No.: 02-02-0740  
Client Reference: LAUSD-East Valley M. S. /53306

Dear Mr. Williams:

Calscience Environmental Laboratories, Inc. (Calscience) is pleased to submit herewith the subject analytical report. The narrative presented below summarizes our analytical effort and clarifies any quality control anomalies which appear in the report.

#### **Sample Condition on Receipt**

Forty-two soil samples were received as part of this Work Order on February 15, 2002. All samples were transferred to the laboratory in an ice-chest following strict chain-of-custody procedures. The temperature of the ice-chest was measured upon arrival in the laboratory and was within acceptable limit (4°C). The samples were logged into the Laboratory Information Management System (LIMS), given laboratory identification numbers, and stored in refrigeration units pending analysis.

#### **Data Summary**

Data is presented on a wet weight basis.

#### **Holding Times**

All holding time requirements were met.

#### **Calibration**

Frequency and control criteria for initial and continuing calibration verifications were met.





### Blanks

The method blank data showed non-detectable levels for all constituents.

### Matrix Spikes

Matrix spikes (MS) and matrix spike duplicates (MSD) were performed at required frequencies. All recoveries were within acceptable limits.

### Laboratory Control Samples


The Laboratory Control Sample (LCS) analysis was performed at the required frequency. All recoveries were within acceptable limits.

### Surrogates

Surrogate recoveries for all samples were within acceptable control limits with the exception of samples SB-5-1, SB-6-5 and SB-38-5. The surrogates 2-fluorophenol and 2,4,6-tribromophenol were outside the acceptable limits due to matrix effect.

If there are any questions regarding this report, please contact the undersigned at (714) 895-5494.

Sincerely,

  
Calscience Environmental  
Laboratories, Inc.  
Marycarol Valenzuela  
Project Manager

  
Michael J. Crisostomo  
Quality Assurance Manager

1/3

0740

Project Number 53306		Project Name/Client LAUSD EAST VALLEY M.S.		Custody Seal #										Rust E&I Cooler #									
Sample Custodian: (Signature) LAURENCE BRUNNE		Analysis Required										Matrix											
Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	PID Reading (ppm)	Label Number	8270	ARCHIVE									Sample Type	Sample Container				
1	SB-39-1	0950	7:15 PM	X		0		X										X SOIL	X ss sleeve				
2	SB-39-3	0951						X															
3	SB-39-5	0956						X															
4	SB-39-7	0957						X															
5	SB-39-10	1004							X														
6	SB-39-12	1005							X														
7	SB-37-1	0909						X															
8	SB-37-2	0910						X															
9	SB-40-1	0745							X														
10	SB-40-3	0746							X														
11	SB-40-5	0752							X														
12	SB-40-7	0757							X														
13	SB-40-10	0757							X														
14	SB-40-12	0758							X														
15	SB-35-1	0622						X															
16	SB-35-3	0623						X															
17	SB-43-1	1028							X														
18	SB-43-3	1031							X									X					
Relinquished by: (Signature) <i>[Signature]</i>		Date / Time 2/15/01 1445		Received by: (Signature) <i>[Signature]</i>		Disposed of by: (Signature)		Items:		Date / Time													
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Disposed of by: (Signature)		Items:		Date / Time													
Send Lab Results To: STEVE WILLIAMS 100 W BROADWAY STE 240 L.B. CA 90802 fax (562) 951-2086				Remarks: 24 HR TAT Federal Express Airbill No.: Lab:				Check Delivery Method: <input type="checkbox"/> Samples delivered in person <input type="checkbox"/> Common carrier				Laboratory Receiving Notes: Custody Seal Intact? Temp. of Shipping Container: Sample Condition:											

2/3

0740

Project Number 53306		Project Name/Client LAUSP EAST VALLEY M.S.				Custody Seal #		Rust E&I Cooler #	
Sample Custodian: (Signature) LAURENCE BROWN						Analysis Required		Matrix	
Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	PID Reading (ppm)	Label Number	B276	ARCHIVE
1	SB-93-5	2/15/04	1037	X		0		X	
2	<del>SB-41-1</del>								
3	SB-41-3		0834					X	
4	SB-41-5		0835					X	
5	SB-41-7		0838					X	
6	SB-41-10		0845					X	
7	SB-41-12		0847					X	
8	SB-42-1		0605					X	
9	SB-42-3		0656					X	
10	SB-42-5		0700					X	
11	SB-42-7		0702					X	
12	SB-42-10		0710					X	
13	SB-42-12		0711					X	
14	SB-76-1		0727					X	
15	SB-76-3		0729					X	
16	SB-76-5		0732					X	
17	SB-76-7		0733					X	
18	SB-76-10		0740					X	

Relinquished by: (Signature) 	Date / Time 2/15/04 1445	Received by: (Signature) 	Disposed of by: (Signature)	Items:	Date / Time
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date / Time

Send Lab Results To: STEVE WILLIAMS PO BOX 240 LA 90002 fax (562) 951-2086	Remarks: 24 HRL TAT Federal Express Airbill No: Lab:	Check Delivery Method: <input type="checkbox"/> Samples delivered in person <input type="checkbox"/> Common carrier	Laboratory Receiving Notes: Custody Seal Intact? Temp. of Shipping Container: Sample Condition:
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0740

Project Number <b>53306</b>		Project Name/Client <b>LAUSD EAST VALLEY M.S.</b>		Custody Seal #										Rust E&I Cooler #																					
Sample Custodian: (Signature) <i>Lawrence Brown</i>				Analysis Required										Matrix																					
Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	PID Reading (ppm)	Label Number	B270	ARCHIVE									Sample Type									Sample Container								
1	SB-26-12	2/15/02	0741	X		6			X									X									X								
2	SB-38-1		0719					X																											
3	SB-38-3		0720					X																											
4	SB-38-5		0723					X																											
5	SB-38-7		0724					X																											
6	SB-38-10		0731						X																										
7	SB-38-12		0732						X									X									X								
8																																			
9																																			
10																																			
11																																			
12																																			
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14																																			
15																																			
16																																			
17																																			
18																																			

Relinquished by: (Signature) <i>Lawrence Brown</i>		Date / Time <b>2/15/02 1445</b>	Received by: (Signature) <i>[Signature]</i>		Disposed of by: (Signature)		Items:		Date / Time	
Relinquished by: (Signature)		Date / Time	Received by: (Signature)		Disposed of by: (Signature)		Items:		Date / Time	

Send Lab Results To: <b>STEAD WILLIAMS 100 W BROADWAY STE 240 L.B. CA 90802 fax (562) 951-2086</b>		Remarks: <b>24 TAT</b>  Federal Express Airbill No: Lab:		Check Delivery Method: <input type="checkbox"/> Samples delivered in person <input type="checkbox"/> Common carrier		Laboratory Receiving Notes: Custody Seal Intact? Temp. of Shipping Container: Sample Condition:	
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**CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.**  
**Sample Summary Report**

**WORK ORDER #:**    **02-02-0740**

**QAPP:**        **0117**

#	Client Sample ID	Matrix	Date Collected	NoC	Comment
1	SB-39-1	S	02/15/2002	1	
2	SB-39-3	S	02/15/2002	1	
3	SB-39-5	S	02/15/2002	1	
4	SB-39-7	S	02/15/2002	1	
5	SB-39-10	S	02/15/2002	1	
6	SB-39-12	S	02/15/2002	1	
7	SB-37-1	S	02/15/2002	1	
8	SB-37-3	S	02/15/2002	1	
9	SB-40-1	S	02/15/2002	1	
10	SB-40-3	S	02/15/2002	1	
11	SB-40-5	S	02/15/2002	1	
12	SB-40-7	S	02/15/2002	1	
13	SB-40-10	S	02/15/2002	1	
14	SB-40-12	S	02/15/2002	1	
15	SB-5-1	S	02/15/2002	1	
16	SB-5-3	S	02/15/2002	1	
17	SB-43-1	S	02/15/2002	1	
18	SB-43-3	S	02/15/2002	1	
19	SB-43-5	S	02/15/2002	1	
20	SB-41-3	S	02/15/2002	1	
21	SB-41-5	S	02/15/2002	1	
22	SB-41-7	S	02/15/2002	1	
23	SB-41-10	S	02/15/2002	1	
24	SB-41-12	S	02/15/2002	1	
25	SB-42-1	S	02/15/2002	1	
26	SB-42-3	S	02/15/2002	1	
27	SB-42-5	S	02/15/2002	1	
28	SB-42-7	S	02/15/2002	1	
29	SB-42-10	S	02/15/2002	1	
30	SB-42-12	S	02/15/2002	1	
31	SB-36-1	S	02/15/2002	1	
32	SB-36-3	S	02/15/2002	1	
33	SB-36-5	S	02/15/2002	1	

**CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.**  
**Sample Summary Report**

**WORK ORDER #:** 02-02-0740

QAPP: 0117

#	Client Sample ID	Matrix	Date Collected	NoC	Comment
34	SB-36-7	S	02/15/2002	1	
35	SB-36-10	S	02/15/2002	1	
36	SB-36-12	S	02/15/2002	1	
37	SB-38-1	S	02/15/2002	1	
38	SB-38-3	S	02/15/2002	1	
39	SB-38-5	S	02/15/2002	1	
40	SB-38-7	S	02/15/2002	1	
41	SB-38-10	S	02/15/2002	1	
42	SB-38-12	S	02/15/2002	1	

WORK ORDER #: 02-02-0740

Cooler \_\_\_\_\_ of \_\_\_\_\_

## SAMPLE RECEIPT FORM

CLIENT: Earth Tech

DATE: 2-15-02

### TEMPERATURE - SAMPLES RECEIVED BY:

#### CALSCIENCE COURIER:

- ☐ Chilled, cooler with temperature blank provided.  
☐ Chilled, cooler without temperature blank.  
☐ Chilled and placed in cooler with wet ice.  
☐ Ambient and placed in cooler with wet ice.  
☐ Ambient temperature.  
☐ °C Temperature blank.

#### LABORATORY (Other than Calscience Courier):

- ☐ °C Temperature blank.  
4 °C IR thermometer.  
☐ Ambient temperature.

Initial: JS

### CUSTODY SEAL INTACT:

Sample(s): \_\_\_\_\_ Cooler: \_\_\_\_\_ No (Not Intact) : \_\_\_\_\_ Not Applicable (N/A): ✓

Initial: JS

### SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples.....	<u>✓</u>		
Sample container label(s) consistent with custody papers.....	<u>✓</u>		
Sample container(s) intact and good condition.....	<u>✓</u>		
Correct containers for analyses requested.....	<u>✓</u>		
Proper preservation noted on sample label(s).....			<u>✓</u>
VOA vial(s) free of headspace.....			<u>✓</u>
Tedlar bag(s) free of condensation.....			<u>✓</u>

Initial: JS

### COMMENTS:

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**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/15/02  
Work Order No: 02-02-0740  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD East Valley M.S./53306

Page 1 of 17

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-39-1	02-02-0740-1	02/15/02	Solid	02/15/02	02/18/02	0202154

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits	Qual			Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	99	31-142				Phenol-d6	105	30-136			
Nitrobenzene-d5	100	28-139				2-Fluorobiphenyl	97	33-144			
2,4,6-Tribromophenol	85	24-152				p-Terphenyl-d14	96	23-160			

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/15/02  
Work Order No: 02-02-0740  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD East Valley M.S./53306

Page 2 of 17

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-39-3	02-02-0740-2	02/15/02	Solid	02/15/02	02/18/02	0202154

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits	Qual			Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	93	31-142				Phenol-d8	100	30-136			
Nitrobenzene-d5	95	28-139				2-Fluorobiphenyl	94	33-144			
2,4,6-Tribromophenol	84	24-152				p-Terphenyl-d14	94	23-160			

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers



Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/15/02  
Work Order No: 02-02-0740  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD East Valley M.S./53306

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-39-5	02-02-0740-3	02/15/02	Solid	02/15/02	02/18/02	0202154

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
2-Fluorophenol	58	31-142				Phenol-d6	91	30-136			
Nitrobenzene-d5	99	28-139				2-Fluorobiphenyl	98	33-144			
2,4,6-Tribromophenol	19	24-152	2			p-Terphenyl-d14	95	23-160			

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/15/02  
Work Order No: 02-02-0740  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD East Valley M.S./53306

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-39-7	02-02-0740-4	02/15/02	Solid	02/15/02	02/18/02	0202154

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits	Qual			Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	92	31-142				Phenol-d6	98	30-136			
Nitrobenzene-d5	95	28-139				2-Fluorobiphenyl	91	33-144			
2,4,6-Tribromophenol	81	24-152				p-Terphenyl-d14	94	23-160			

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/15/02  
Work Order No: 02-02-0740  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD East Valley M.S./53306

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-37-1	02-02-0740-7	02/15/02	Solid	02/15/02	02/18/02	0202154

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits	Qual			Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	90	31-142				Phenol-d6	96	30-136			
Nitrobenzene-d5	95	28-139				2-Fluorobiphenyl	94	33-144			
2,4,6-Tribromophenol	83	24-152				p-Terphenyl-d14	94	23-160			

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/15/02  
Work Order No: 02-02-0740  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD East Valley M.S./53306

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-37-3	02-02-0740-8	02/15/02	Solid	02/15/02	02/18/02	0202154

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits	Qual			Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	94	31-142				Phenol-d6	99	30-136			
Nitrobenzene-d5	99	28-139				2-Fluorobiphenyl	97	33-144			
2,4,6-Tribromophenol	86	24-152				p-Terphenyl-d14	97	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/15/02  
Work Order No: 02-02-0740  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD East Valley M.S./53306

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-5-1	02-02-0740-15	02/15/02	Solid	02/15/02	02/18/02	0202154

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	0.12	0.40	1	J	mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	0.15	0.50	1	J	mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	0.22	0.50	1	J	mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits	Qual			Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	2	31-142	2			Phenol-d6	50	30-136			
Nitrobenzene-d5	99	28-139				2-Fluorobiphenyl	100	33-144			
2,4,6-Tribromophenol	0	24-152	2			p-Terphenyl-d14	100	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/15/02  
Work Order No: 02-02-0740  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD East Valley M.S./53306

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-5-3	02-02-0740-16	02/15/02	Solid	02/15/02	02/18/02	0202154

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzydine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
2-Fluorophenol	91	31-142				Phenol-d6	95	30-136			
Nitrobenzene-d5	83	28-139				2-Fluorobiphenyl	85	33-144			
2,4,6-Tribromophenol	83	24-152				p-Terphenyl-d14	93	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/15/02  
Work Order No: 02-02-0740  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD East Valley M.S./53306

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-36-1	02-02-0740-31	02/15/02	Solid	02/15/02	02/18/02	0202154

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control		Qual		Surrogates:	REC (%)	Control		Qual	
		Limits						Limits			
2-Fluorophenol	95	31-142				Phenol-d6	99	30-136			
Nitrobenzene-d5	86	28-139				2-Fluorobiphenyl	88	33-144			
2,4,6-Tribromophenol	83	24-152				p-Terphenyl-d14	96	23-160			

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/15/02  
Work Order No: 02-02-0740  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD East Valley M.S./53306

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-36-3	02-02-0740-32	02/15/02	Solid	02/15/02	02/18/02	0202154

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits	Qual			Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	95	31-142				Phenol-d6	101	30-136			
Nitrobenzene-d5	96	28-139				2-Fluorobiphenyl	97	33-144			
2,4,6-Tribromophenol	92	24-152				p-Terphenyl-d14	102	23-160			

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers



Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/15/02  
Work Order No: 02-02-0740  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD East Valley M.S./53306

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-36-5	02-02-0740-33	02/15/02	Solid	02/15/02	02/18/02	0202154

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	NO	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Banzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
2-Fluorophenol	38	31-142				Phenol-d6	81	30-136			
Nitrobenzene-d5	84	26-139				2-Fluorobiphenyl	87	33-144			
2,4,6-Tribromophenol	2	24-152	2			p-Terphenyl-d14	81	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/15/02  
Work Order No: 02-02-0740  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD East Valley M.S./53306

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-36-7	02-02-0740-34	02/15/02	Solid	02/15/02	02/18/02	0202154

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benazidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
2-Fluorophenol	92	31-142				Phenol-d6	97	30-136			
Nitrobenzene-d5	86	28-139				2-Fluorobiphenyl	86	33-144			
2,4,6-Tribromophenol	81	24-152				p-Terphenyl-d14	87	23-160			

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/15/02  
Work Order No: 02-02-0740  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD East Valley M.S./53306

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-38-1	02-02-0740-37	02/15/02	Solid	02/15/02	02/18/02	0202154

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
2-Fluorophenol	91	31-142				Phenol-d6	94	30-136			
Nitrobenzene-d5	85	28-139				2-Fluorobiphenyl	87	33-144			
2,4,6-Tribromophenol	80	24-152				p-Terphenyl-d14	84	23-160			

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/15/02  
Work Order No: 02-02-0740  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD East Valley M.S./53306

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-38-3	02-02-0740-38	02/15/02	Solid	02/15/02	02/18/02	0202154

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits	Qual			Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	94	31-142				Phenol-d6	98	30-136			
Nitrobenzene-d5	85	28-139				2-Fluorobiphenyl	86	33-144			
2,4,6-Tribromophenol	83	24-152				p-Terphenyl-d14	89	23-160			

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/15/02  
Work Order No: 02-02-0740  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD East Valley M.S./53306

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-38-5	02-02-0740-39	02/15/02	Solid	02/15/02	02/18/02	0202154

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
2-Fluorophenol	53	31-142				Phenol-d6	91	30-136			
Nitrobenzene-d5	90	28-139				2-Fluorobiphenyl	132	33-144			
2,4,6-Tribromophenol	7	24-152	2			p-Terphenyl-d14	91	23-160			

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/15/02  
Work Order No: 02-02-0740  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD East Valley M.S./53306

Page 16 of 17

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-38-7	02-02-0740-40	02/15/02	Solid	02/15/02	02/18/02	0202154

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits	Qual			Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	95	31-142				Phenol-d6	98	30-136			
Nitrobenzene-d5	87	28-139				2-Fluorobiphenyl	88	33-144			
2,4,6-Tribromophenol	84	24-152				p-Terphenyl-d14	90	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/15/02  
Work Order No: 02-02-0740  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD East Valley M.S./53306

Page 17 of 17

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-04-010-1,194	N/A	Solid	02/15/02	02/15/02	0202154

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits	Qual			Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	75	31-142				Phenol-d6	60	30-136			
Nitrobenzene-d5	107	28-139				2-Fluorobiphenyl	81	33-144			
2,4,6-Tribromophenol	82	24-152				p-Terphenyl-d14	113	23-160			

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers



**Quality Control - Spike/Spike Duplicate**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/15/02  
Work Order No: 02-02-0740  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD East Valley M.S./53306

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB-36-3	Solid	GC/MS P	02/15/02	02/18/02	0202074032

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	98	96	53-118	3	0-19	
2-Chlorophenol	96	94	60-119	3	0-18	
1,4-Dichlorobenzene	94	92	56-131	2	0-18	
N-Nitroso-di-n-propylamine	102	98	64-123	3	0-18	
1,2,4-Trichlorobenzene	84	85	52-144	1	0-17	
4-Chloro-3-Methylphenol	98	97	45-135	1	0-20	
Acenaphthene	102	104	45-152	1	0-18	
4-Nitrophenol	105	100	45-135	5	0-20	
2,4-Dinitrotoluene	110	111	42-128	1	0-23	
Pentachlorophenol	91	87	45-135	5	0-20	
Pyrene	94	96	45-135	1	0-20	

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/15/02  
Work Order No: 02-02-0740  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD East Valley M.S./53306

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-04-010-1,194	Solid	GC/MS P	02/15/02	15FEB004	0202154

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Phenol	10	9.0	90	67-118	
2-Chlorophenol	10	9.2	92	72-119	
1,4-Dichlorobenzene	10	8.9	89	69-118	
N-Nitroso-di-n-propylamine	10	10	103	70-112	
1,2,4-Trichlorobenzene	10	8.3	83	65-135	
4-Chloro-3-Methylphenol	10	9.8	98	45-135	
Acenaphthene	10	11	109	61-142	
4-Nitrophenol	10	9.8	98	45-135	
2,4-Dinitrotoluene	10	11	114	47-137	
Pentachlorophenol	10	9.2	92	45-135	
Pyrene	10	11	107	45-135	

## GLOSSARY OF TERMS AND QUALIFIERS

Work Order Number: 02-02-0740

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<u>Qualifier</u>	<u>Definition</u>
2	Surrogate spike compound was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
J	Analyte was detected at a concentration below the reporting limit. Reported value is estimated.
ND	Not detected at indicated reporting limit.



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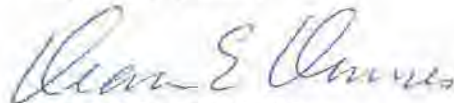
May 16, 2002

Theresa Kee  
Law Department  
Sears, Roebuck and Co.  
3333 Beverly Road, A2-239B  
Hoffman Estates, IL 60179

Dear Theresa:

I am forwarding additional comments and revisions to the Preliminary Environmental Assessment the Los Angeles Unified School District is preparing for the condemnation of the Sears Auto Center in North Hollywood, California. The comments are pretty self-explanatory. The accompanying sheets are to replace those we have previous sent you and discussed with you. Please call me with any questions or technical questions can be addressed directly to Steve Williams for the District's environmental consultant at 562 951 2272.

Very truly yours,



DEAN E. DENNIS  
OF

HILL, FARRER & BURRILL LLP

DED:lar  
cc. Gene Feilice  
w/o enclosures  
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RESPONSE TO DTSC COMMENTS ON THE  
PRELIMINARY ENVIRONMENTAL ASSESSMENT

FOR THE

PROPOSED EAST VALLEY MIDDLE SCHOOL NO. 1  
LAUREL CANYON BOULEVARD AND HAMLIN STREET  
LOS ANGELES, CALIFORNIA

Comments provided by the DTSC are provided in the left column and responses provided by Earth Tech and LAUSD are provided in the right column. Revised text and tables in the PEA report will be provided to the DTSC as replacement sheets.

Comment No.	Comment DTSC Project Manager Comments Ms. Jennifer Jones Glendale, California	Response
1.	<p>Page 6-5; Section 6.2.5.1:</p> <p><u>"Only one VOC was detected, PCE at a maximum concentration of 1.5 micrograms per liter (Mg/L)..."</u></p> <p>Correct the VOC concentration units from Mg/L to µg/L.</p>	The edit will be made to the text.
2.	<p>Page 6-10; Section 6.3.5.1:</p> <p>Revise the table header to include the words "Minimum" and "Maximum" above the appropriate columns indicating these concentrations.</p>	The edit will be made to the text. In addition the words 'Number of' will be added to the header of the Detection column.
3.	<p>Page 12-2; Section 12.0:</p> <p><u>"The total depth of the elevator piston was estimated to be approximately 25 feet bgs."</u></p> <p>This sentence is not consistent with the sentence on Page 4-1 that states <u>"The elevator is equipped with a hydraulic cylinder, which extends approximately 15 feet below the bottom of the elevator or approximately 30 feet bgs."</u> Reconcile this inconsistency.</p>	Page 4-1 will be revised to reflect the approximate depth of 25 feet bgs.

	<b>Comments</b> <b>Geological Services Unit</b> <b>Ms. Juli Osborne</b> <b>Glendale, California</b>	
1.	<p>Page 3-5; Section 3.2.2:</p> <p>The bulleted items summarize the information included in the EDR report. After identification of facilities included on environmental lists, the consultant makes a conclusion as to whether these facilities pose an environmental risk to the subject site. The consultant identifies five CORTESE sites within a one-mile radius of the site. However, there is no conclusion regarding the impact, if any, of these facilities on the subject site. Include a summary statement on the five CORTESE sites in the final PEA.</p>	<p>The text will be revised to reflect that the five CORTESE sites identified within a one-mile radius do not represent an environmental concern.</p>
2.	<p>If step-out sampling had not yet been completed at the location of SB-21, GSU would recommend analysis for lead in addition to SVOCs, since lead appears to be increasing with depth. If confirmation samples are required after excavation of the area of SB-21, lead analyses could be performed at that time.</p>	<p>Step out sampling has been conducted in the vicinity of SB-21. Lead was not analyzed. However, after removal of the impacted soil lead analysis will be performed as part of the confirmation-sampling program.</p>
	<b>Comments</b> <b>Human and Ecological Risk Division Bill Bosan, Ph.D.</b> <b>Staff Toxicologist</b> <b>Glendale, California</b>	
1.	<p>Page 7-1; Section 7.0:</p> <p>The second paragraph states that the majority of estimated site risk was due to semi-volatile organic compounds (SVOCs). This summary should more explicitly state that the estimated cancer risk was primarily attributable to polycyclic aromatic hydrocarbons (PAHs).</p>	<p>References to SVOCs in Page 7-1, Section 7.0 has been replaced with the term PAHs</p>



2.	<p>Page 7-4; Section 7.3:</p> <p>For the hierarchy of toxicity criteria presented in the second paragraph, the Cal/EPA Cancer Potency Factors should also include Chronic Reference Exposure Levels (RELs), which are discussed in more detail later in this section.</p>	<p>A reference to Chronic Reference Exposure Levels (RELs) has been added to Section 7.3.</p>										
3.	<p>Page 7-5; Section 7.3.2:</p> <p>The Cal/EPA inhalation toxicity criteria referenced in the second paragraph should be Chronic <b>Reference</b> Exposure Levels, not <b>Relative</b> Exposure Levels. When a REL is not available for a particular chemical, the inhalation reference concentration, as published in IRIS, should be used (e.g., 1,1,1-trichloroethane). For tetrachloroethene (PCE), the chronic REL, as published most recently by OEHHA, is 35 µg/m<sup>3</sup> or 3.5E-02 mg/m<sup>3</sup>, which corresponds to an inhalation reference dose of 1E-02 mg/kg-day. The DTSC's VLOOKUP table incorporates chronic RELs, when available. Otherwise, the standard EPA RfCs are utilized. This section should be revised accordingly.</p>	<p>References to Chronic Relative Exposure Levels have been replaced by Chronic Reference Exposure Levels in Section 7.3.2. REL's published by OEHHA were used in the assessment. Section 7.0 was revised accordingly.</p>										
4.	<p>Page 7-6; Section 7.4:</p> <p>The third paragraph should be revised to reflect that four soil samples from the site were used to obtain site-specific physical parameters, as shown in Table 8.</p> <p>The third paragraph presents the average bulk density (1.46 g/cm<sup>3</sup>), average total porosity (0.457) and average measured water content (0.204). Using the physical parameter data from the four sample locations presented in Table 8, HERD estimated the following average values, which differ from the above values:</p> <table><tr><th>PHYSICAL PARAMETER</th><th>AVERAGE VALUE</th></tr><tr><td>Bulk Density</td><td>1.51 g</td></tr><tr><td>Total Porosity</td><td>0.4</td></tr><tr><td>Air-Filled Porosity</td><td>0.3</td></tr><tr><td>Water-Filled Porosity</td><td>0.1</td></tr></table> <p>The total porosity is defined as the air-filled porosity + water-filled porosity. The stated measured water content (0.204) would result in a total porosity of 0.538, which is not consistent with the measured bulk and grain densities presented in Table 8 (e.g., the total porosity = 1 - (ρ<sub>s</sub>/ρ<sub>b</sub>)). I assume the measured water content refers to the eighth column of</p>	PHYSICAL PARAMETER	AVERAGE VALUE	Bulk Density	1.51 g	Total Porosity	0.4	Air-Filled Porosity	0.3	Water-Filled Porosity	0.1	<p>The derivation of soil physical parameters for use in the Johnson and Ettinger model have been added to Table 8. Values derived by Earth Tech are now very similar to those derived by HERD. Value differences can be attributed to rounding errors. However, the incremental cancer risks and health hazards estimated for PCE by HERD are essentially the same as the revised risk values calculated by Earth Tech using the soil physical parameters listed in Table 8.</p> <p><u>Input parameters used in the Johnson and Ettinger model are summarized in the revised Table 14.</u></p> <p>Health risks and hazards associated with indoor air exposure to VOCs were revised using parameters listed in Table 14. Revised estimates of incremental cancer risk are presented in revised Table 21. Revised estimates of potential</p>
PHYSICAL PARAMETER	AVERAGE VALUE											
Bulk Density	1.51 g											
Total Porosity	0.4											
Air-Filled Porosity	0.3											
Water-Filled Porosity	0.1											

	<p>porosity = <math>1 - (\rho_w / \rho_s)</math>). I assume the measured water content refers to the eighth column of Table 8, Pore Fluid Saturations, % <math>P_v</math>, Water. This is the water volume under saturated conditions, which is not the water-filled porosity of the vadose zone under ambient conditions. Please revise this section and the Johnson and Ettinger Model outputs, accordingly. In addition, Appendix D presents physical property data that do not match the data summarized in Table 8. Please address these data differences.</p> <p>Using the average physical parameters from the above table, the maximum reported PCE soil gas concentration (<math>5,789 \mu\text{g}/\text{m}^3</math>), depth to contamination of 274.3 cm and an average soil temperature of <math>20.2^\circ\text{C}</math>, the indoor air risk and hazard for PCE were estimated to be <math>2.5\text{E-}06</math> and <math>2.8\text{E-}02</math>, respectively. These values are slightly higher than the risk and hazard presented in Appendix E for the maximum reported PCE concentration (<math>1.5\text{E-}06</math> and <math>1.7\text{E-}02</math>, respectively). These values were estimated using the Model default soil type, LS. According to the Johnson and Ettinger Model User's Guide, the vadose zone soil vapor permeability can be estimated using the measured, saturated hydraulic conductivity. Using the average hydraulic conductivity from Table 8 (<math>1.41\text{E-}04 \text{ cm}/\text{sec}</math>) and following the equations presented in the Johnson and Ettinger Model User's Guide, the soil vapor permeability was estimated to be <math>1.87\text{E-}09 \text{ cm}^2</math>. Incorporating this user-defined vapor permeability, together with the average, site-specific physical parameters, the estimated indoor air risk and hazard for PCE become <math>4.2\text{E-}07</math> and <math>4.7\text{E-}03</math>, respectively. The HERD J&amp;E Model outputs are included in Attachment 1. Please revise the J&amp;E model outputs to incorporate average physical parameters and the user-defined vapor permeability. Given the low estimated indoor air risk for PCE, estimation of the 95% UCL soil gas concentrations is not really warranted and can be deleted from the human health screening evaluation.</p>	<p>health hazards are presented in revised Table 22. Revised health risks and hazards estimates for the multipathway exposures are presented in revised Table 25.</p> <p>The discussion of health risks associated with the 95%UCL has been removed. Table 26 was also removed.</p>
5.	<p>Page 7-8; Section 7.5:</p> <p>Since 1) outdoor air risks for VOCs rarely, if ever, drive the cancer risk at a site; and 2) soil gas data was conservatively evaluated using the Johnson and Ettinger Indoor Air Risk Model, outdoor air emissions need not be estimated and this section can be deleted from the human health screening evaluation.</p>	<p>Earth Tech agrees that the discussion of VOCs in outdoor air could be removed without affecting the conclusions of the risk assessment. However, removing the outdoor air discussion would require a significant revision of the report and tables. Since the section is not considered to be a deficiency or deviation from guidance, Earth Tech left the section in place. If future revisions to the report are required, Earth Tech will remove the outdoor air discussion (and associated tables) at that time.</p>

6.	<p>Page 7-13; Section 7.6.5:</p> <p>This section should be revised to state that the site risk is primarily attributable to PAHs. Please see Specific Comment No.1.</p>	<p><b>References to SVOCs in Page 7-13, Section 7.6.5 have been replaced with the term PAHs.</b></p>
7.	<p>Page 13-2; Section 13.1.4:</p> <p>Please revise the conclusions, consistent with the above recommendations. HERD concurs with the recommendation of further action only for additional characterization of PAHs around SB-21-0.5.</p>	<p><b>Section 13.14 has been revised to accommodate revised health risk estimates. In addition, where appropriate, references to SVOCs have been replaced with the term PAHs in the conclusion and recommendations section.</b></p>





## LIST OF TABLES

<u>Table</u>	<u>Title</u>
17	Incremental Cancer Risk Estimated for Dust Particles in Air – Hypothetical On-Site Residential Receptors
18	Health Hazards Estimated for the Ingestion and Dermal Contact with Soil- Hypothetical On-Site Residential Receptors
19	Health Hazards Estimated for the Inhalation of Dust Particles in Air – Hypothetical On-Site Residential Receptors
20	Residential Cumulative Risk and Hazards
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23	Incremental Cancer Risk Estimated for Exposure to Soil Gas VOCs in Outdoor Air – Hypothetical On-Site Residential Receptors
24	Health Hazards for Inhalation of Soil Gas VOCs in Outdoor Air – Hypothetical On-Site Residential Receptors
25	Summarized Total Site Cancer Risks and Health Hazards

A total of 30 chemicals were identified as COPCs in soil and soil gas at the site. These COPCs were evaluated in the human health screening evaluation.

Using maximum COPC concentrations detected at the site, a total incremental cancer risk for hypothetical residential exposure to soil through direct contact (including incidental ingestion, dermal contact and inhalation of dust particles) was estimated to be  $8\text{E-}04$ . The chemicals that contributed to more than 99.9 percent of the estimated incremental cancer risk were the carcinogenic Polycyclic aromatic hydrocarbons (PAHs) detected in soil sample SB-21-0.5. The lateral extent of PAH impacted soil seems to be very limited as only one of 77 samples collected at the site contained detectable concentrations of PAHs.

The total hazard index for hypothetical residential exposure to soil through direct contact (including incidental ingestion, dermal contact and inhalation of dust particles) was estimated to be  $2.7\text{E-}02$ . The estimated hazard index for the site is below 1.0, the benchmark level for non-cancer effects.

The total cancer risk and hazard index associated with exposure to VOC-impacted indoor air were calculated to be  $4.2\text{E-}7$  and  $7.8\text{E-}03$ , respectively. The cancer risk is lower than the DTSC risk criterion of  $1\text{E-}6$ . The total hazard index for this pathway is below the level of regulatory concern (i.e., 1.0).

The use of the maximum detected soil gas concentrations provides a conservative estimate of associated cancer risks and health hazards. Furthermore, assuming that a resident resides at the site 24 hours per day for 30 years also provides a conservative estimate of the chemical exposure.

For all analytes modeled, the risk due to inhalation of outdoor air was approximately three orders of magnitude smaller than the risk due to inhalation of indoor air. The hazard index due to inhalation of outdoor air was more than an order of magnitude smaller than the hazard index due to inhalation of indoor air. The estimated cancer risk due to inhalation of VOCs in outdoor air was  $2.2\text{E-}9$ . This value is below the cancer risk criterion of  $1\text{E-}6$ . The estimated total health hazard index due to inhalation of VOCs in outdoor air was  $1.2\text{E-}3$ . This value is also below the level of concern of 1.0.

Cumulative potential risks from soil and soil-gas exposure were calculated by summing all pathways. The total cancer risk is  $8\text{E-}4$  at the proposed school site, which exceeds the acceptable criteria of  $1\text{E-}6$ . If the PAHs data from SB-21-0.5 were removed, the total site cancer risk would be less than the cancer risk criterion of  $1\text{E-}6$ . Note that the modeled risk is based on the maximum detected concentrations in soil and soil-gas samples rather than an estimate of the average concentrations and therefore provides a



conservative estimate of health risk. The cumulative site hazard index is 3.67E-02, which is below the target hazard index of 1.0.

Based on the concentrations of PAHs detected in soil sample SB-21-0.5, additional assessment to determine the distribution and occurrence of elevated SVOCs should be conducted in the form of a supplemental site investigation (SSI). Results of the SSI will be summarized in a SSI Report with recommendations for either remedial action or no further action. Based on the results of this PEA, no further action for the remainder of the site should be required.

- There are four CALSITES (HWS) facilities located within a one-mile radius of the proposed school site. The sites appear unlikely to negatively impact the proposed school site due to their distance (1/2 mile and greater).
- One LUST site was identified within 1/4 mile north-northeast of the proposed school site. This site has been closed, no evidence reviewed, suggests it would negatively impact the proposed school site.
- There are 5 CORTESE sites identified within a one-mile radius of the proposed school site. The 5 CORTESE sites are not considered to represent an environmental concern for the subject property.
- There is one registered UST site southeast and adjacent to the proposed school site. This site is not included on any release or contamination related databases. This site is not considered to be a recognized environmental condition relative to the subject property.
- No oilfield activity was identified on or adjacent to the proposed school site (Munger Map Book, 1994, Page W-61).

### 3.3 HAZARDOUS SUBSTANCE/WASTE MANAGEMENT INFORMATION

The following current and/or historic hazardous materials or waste storage facilities were identified in the EDR Regulatory database report, records review, interviews, and/or site reconnaissance performed by Earth Tech (Earth Tech August 2001, December 2001):

- The Sears Auto Center stores new oil in two 200-gallon aboveground storage tanks (ASTs) inside the west building. There are two parts washers that are serviced by the Safety Kleen Company within the shop. Waste oil is stored in 55-gallon drums in the service bays. A 1,000-gallon AST located outside of the west building was formerly used to store waste oil, but is not currently in use. This AST is located within a secondary containment. Used automobile batteries are stored in the service bays and taken off-site by Johnson Controls.
- Nine UST vent pipes were observed on the roof of the Sears Auto Center. A permit was issued in 1951 to Sears, Roebuck and Company for installation of nine USTs at 12137 Hamlin Street. The permit for the USTs was as follows: one 4,000-gallon UST for storage of gasoline, one 8,000-gallon UST for storage of gasoline, six 1,000-gallon USTs for storage of fresh lube oil, and one 1,000-gallon UST for storage of waste oil. In 1971, a permit was issued to Sears Auto Center to abandon one atmospheric tank. The permit did not specify the tank contents, size, or location. In 1988, a permit from the City of Los Angeles Fire Department was issued to Sears Auto Center to abandon seven atmospheric tanks. Documentation accompanying this permit indicates that the seven 1,000-gallon USTs were removed. A note on the site plan attached to the permit indicates that a soil sample was to be taken under the waste oil UST. No documentation of this soil sample was found in the records. Sears Auto Center is also listed as having seven USTs. The USTs listed include one 500-gallon UST for waste oil and six USTs of unspecified size containing unspecified product. The Sears Auto Center is also included on the CA FID UST list, which shows the

facility as an inactive UST location. The former USTs at the Sears Auto Center are considered to be a potential environmental condition.

- Hazardous materials in the strip shopping center tenant spaces were limited to small quantities of janitorial supplies and latex paint.
- The only hazardous wastes currently generated at the property are waste oil, batteries, and waste brake cleaning fluid from the Sears Auto Center. The auto center has only recently resumed performing oil changes and has not yet made arrangements for disposal of the waste oil. The site does not currently generate infectious waste.
- Waste Management removes refuse generated at the site for all the commercial waste.
- The LADWP services the proposed school site for electricity and water, and the Southern California Gas Company for natural gas. One pole-mounted electrical transformer was observed near the southeast corner of the residential area northwest of the subject property. Two transformer vaults were observed on the subject property; one located in the alley, west of the strip shopping center and one located in Hamlin Street, south of the southeast corner of the auto center. All of these transformers are owned by LADWP. No staining or signs of leakage were noted in association with the transformers located on the subject property.
- Photo City (former business) at 6525 Laurel Canyon Boulevard is listed as a small-quantity generator with no violations found in the record. Photo City is listed for the generation of photo-chemicals and photo-processing waste. This facility is no longer a tenant at the subject property. Sears store, at 12121 Victory Boulevard south of the property was also listed as a small-quantity generator with no violations found. The listing on the RCRIS database does not represent a recognized environmental condition to the proposed school site.
- Avenue Plus, a clothing store, at 6543 Laurel Canyon Boulevard is listed for the generation of asbestos-containing waste. The Valley Plaza Shopping Center is listed for the generation of asbestos-containing waste. Sears Auto Center is listed for the generation of alkaline solution without metals; off-specification, aged, or surplus organics; asbestos-containing waste; waste oil and mixed oil; laboratory waste chemicals; unspecified solvent mixture waste; and aqueous solution with less than 10% total organic residues. The listing on the HAZNET database does not represent a recognized environmental condition to the proposed school site.
- The FINDS database is a pointer database, which refers back to the Photo City and Sears Auto Center listings on the RCRIS-SQG database. The FINDS database listing does not represent a recognized environmental condition to the proposed school site.

### **3.3.1 PREVIOUS INVESTIGATIONS**

In addition to the Phase I conducted by Earth Tech, a preliminary Phase I Environmental Site Assessment was conducted for the entire Valley Plaza Shopping Center, which includes the subject property, by California Environmental for J.H. Snyder Company, LLC and is dated July 2000. This assessment noted the existing buildings and a one-story vacant commercial structure located at the northwest corner of

Hamlin Street and Bellingham Avenue. This structure was reported to be a former Sears Garden Center/Customer Pick-up facility (note: this building was no longer present during Earth Tech's site reconnaissance on August 8, 2001). The report states that the Sears Auto Center utilizes and generates small quantities of waste oil, solvents, automobile batteries, and other miscellaneous automotive materials. The J.H. Snyder report indicates that nine soil borings were drilled at the Sears Auto Center in 1994. Soil samples collected were found to have concentrations of perchloroethylene also referred to as tetrachloroethene (PCE) up to 19 parts per billion (ppb). The report does not indicate where the soil borings were located, depth of the samples collected, or if the soil samples were analyzed for other compounds.



#### 4.0 APPARENT PROBLEM

Based on the background information reviewed and the observations noted during the site visits, several potential environmental concerns (PECs) were identified. Similar PECs are grouped together as listed below.

- A portion of the proposed school site has been developed with an automobile service center since the early 1950's. Nine USTs were installed at this site in 1951. There is documentation that at least eight of the nine USTs were removed from the subject property by 1988. No documentation concerning the removal or abandonment of the tanks was found; therefore, the possible existence of USTs in the former UST area and residual hydrocarbons beneath the former USTs is a PEC.
- The automobile service center currently has four clarifiers, which receive water from several areas within the facility before discharging to the sanitary sewer. The potential for the clarifiers to have an unauthorized release is a PEC.
- The automobile service center currently has 17 underground hydraulic lifts. In addition, indications are present that at least six additional hydraulic lifts have been abandoned on the site. The potential for the hydraulic cylinders to leak in the subsurface exists.
- One two-story elevator exists at the automobile service center. The elevator is equipped with a hydraulic cylinder, which extends approximately 15 feet below the bottom of the elevator or approximately 25 feet bgs.
- Staining was observed on the concrete floor adjacent to the downstairs air compressors floor drain.
- A former petroleum pipeline was identified beneath Laurel Canyon Boulevard.
- A storm drain inlet is located in the central parking lot.
- A transformer is present north of the Sears Auto Center.
- Existing waste oil ASTs at the Sears Auto Center.
- A former Sears Garden Center was located on the northwest corner of Hamlin Street and Bellingham Avenue.
- Sampling performed as part of a Preliminary Phase I investigation indicated perchloroethylene (PCE) in soil at the Sears Auto Center (J.H. Snyder, 2000). The report does not indicate where the soil borings were located at Sears Auto Center, depth of the samples collected, or if the soil samples were analyzed for other compounds. Therefore, the potential for soil impacted with PCE exists within the subject property area.

## 6.2.5 SOIL GAS ANALYTICAL RESULTS

The following sections summarize the results of the soil gas testing program. A summary of the analytical results of the soil gas samples is included in Tables 1 and 2. The laboratory reports and chain-of-custody documentation are included in Appendix D.

The following tables within this section present only those compounds detected by their respective analysis. If other compounds exist within a particular analyte list and were not listed in the table, then they were not detected.

### 6.2.5.1 VOC Analysis Using EPA Method 8260B

Only one VOC was detected, PCE at a maximum concentration of 1.5 micrograms per liter ( $\mu\text{g/L}$ ), in the 48 soil gas samples (including duplicates and purge volume tests) analyzed in the mobile laboratory using EPA Method 8260B.

### 6.2.5.2 VOC Analysis Using EPA Method TO-14A

Eight soil gas samples were collected in Summa canisters for analysis at a fixed-base laboratory. VOCs were detected in all eight samples analyzed by EPA Method TO-14A. For consistency with the mobile laboratory analysis results, the EPA Method TO-14A results [(ppbv/v)] were converted to units of  $\mu\text{g/L}$ . The following table summarizes the minimum and maximum concentrations of detected VOCs. No other VOCs were detected.

VOCs	Number of Detections	Minimum Concentration ( $\mu\text{g/L}$ )	Maximum Concentration ( $\mu\text{g/L}$ )
Dichlorodifluoromethane	7	0.0046	0.0754
Trichlorofluoromethane	4	0.0039	0.1713
1,1,1-Trichloroethane	5	0.0049	0.0078
Benzene	4	0.0023	0.0062
Toluene	8	0.0146	0.0996
Trichloroethene	2	0.0076	0.0207
Tetrachloroethene	8	0.0296	5.7896
Ethylbenzene	8	0.0119	0.2957
p/m-Xylene	8	0.0662	1.1473
Styrene	1	0.0042	0.0042
o-Xylene	8	0.0278	0.4854
1,3,5-Trimethylbenzene	7	0.0055	0.1399
1,2,4-Trimethylbenzene	8	0.0130	1.8485

### 6.3.5.1 Metals

A total of 82 soil samples (including duplicates) were analyzed for metals using EPA Methods 6010B and 7471A. Each of the Title 22 metals was detected in soil at the site. The following table identifies the range of concentrations found in the soil samples collected.

Metals	Number of Detections	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)
Antimony	25	0.207J	1.56
Arsenic	33	0.133J	1.75
Barium	78	30.9	315
Beryllium	78	0.0619J	0.583
Cadmium	77	0.0191J	0.941
Chromium (Total)	78	2.13	45.6
Cobalt	78	2.12	14
Copper	78	2.72	51.4
Lead	78	0.828	39.3
Mercury	68	0.0130J	0.245
Molybdenum	50	0.0209J	1.58
Nickel	78	2.07	17.9
Selenium	12	0.229J	1.64
Silver	3	0.0305J	0.111J
Thallium	0	--	--
Vanadium	78	6.6	64.6
Zinc	78	10.8	202

Background soil samples were not collected at the site. Analytical results from soil samples collected at nearby Francis Polytechnic High School (approximately 2 miles north of the site), were used as background soil sample data for metals. Table 10 presents the background metals results.

### 6.3.5.2 SVOCs by EPA Method 8270C

A total of 79 soil samples were analyzed for SVOCs. Of this data set twelve separate SVOCs were detected in one sample. Sample SB-21-0.5 was reanalyzed to confirm the concentration (SB-21-0.5R) and then a composite sample (SB-21-0.5H) was prepared from sample SB-21-0.5 and analyzed again. All three samples had detectable concentrations of SVOCs. The specific compounds and range of concentrations detected are as follows:

SVOCs	Number of Detections	Minimum Concentration (Mg/Kg)	Maximum Concentration (Mg/Kg)
Phenanthrene	3	0.42	1.6
Anthracene	3	0.13J	0.54
Fluoranthene	3	3.3	14
Pyrene	3	3.4	14

## **7.0 HUMAN HEALTH SCREENING EVALUATION**

A health risk screening was conducted in accordance with the PEA Guidance Manual (DTSC, 1994 second printing 1999) procedures for human health evaluation. As stated by the DTSC, the goal of the screening process is to provide risk managers with an estimate of the potential chronic health hazards that could arise due to exposure to chemicals at the site. Because of the simplified nature of the exposure assumptions incorporated into the PEA procedure, the results are not absolute estimates of the risks or hazards at a site, but rather are health-conservative estimates. As a result, the PEA procedure tends to overestimate potential health hazards and cancer risks rather than underestimate them. Consequently, if the PEA results suggest that cancer risks and non-carcinogenic health hazards are below levels of concern, no further risk assessment or investigation is generally warranted. The following sections discuss the potential risks to humans via exposure to chemicals of potential concern (COPCs) in site soil and air at the proposed East Valley Middle School No. 1. The results of the human health screening evaluation are presented in Tables 11 through 26.

The results of this health risk assessment estimated a site cancer risk of  $8.0\text{E-}4$  and a site hazard index of  $6.8\text{E-}2$ . The site hazard index is below the commonly used hazard index limit of 1.0. The estimated risk of  $8.0\text{E-}4$  was due solely to the concentrations of polycyclic aromatic hydrocarbons (PAHs) that were found in one soil boring (SB-21). Assuming that exposure to the PAHs in the area confined to SB-21 can be mitigated such that the cancer risk is negligible, the resultant site cancer risk would result entirely from the potential inhalation of volatile organic compounds (VOCs) in indoor air. This resultant site cancer risk is  $9.5\text{E-}07$ . This risk value is lower than the DTSC's acceptable cancer risk level of  $1\text{E-}6$ .

### **7.1 EXPOSURE PATHWAYS AND MEDIA OF CONCERN**

The PEA investigation analytical results collected by Earth Tech indicated that the COPCs and media of concern are SVOCs and pesticides in soil, and organic compounds in soil vapor. As indicated in the conceptual site model (Figure 5), the primary sources for the COPCs have not been positively identified, but former underground storage tanks (USTs) and possibly waste oil clarifiers used on-site could potentially be a source of VOCs in soil vapor. As discussed in Section 5.0, potential exposure routes include ingestion, inhalation, and dermal contact.

As discussed in Section 5, the groundwater pathway was judged to be incomplete, and therefore not evaluated as a potential exposure pathway.



### **7.1.1 POTENTIAL EXPOSURE RECEPTOR POPULATIONS**

Because the PEA is a conservative assessment of potential exposure and risks, residents are evaluated, as the receptor population of concern. Risk values incorporate exposure factors for both adults and child populations. This population is assumed to be living on the site 24 hours a day for 24 years as adults and 24 hours a day for 6 years as children.

At the proposed school site, the actual receptor populations are students on-site during the school day, and teachers and other support staff at the school. These populations are anticipated to be at the school for a much shorter frequency and duration of exposure thereby limiting the amount of time exposed to site contaminants.

### **7.2 CHEMICALS OF POTENTIAL CONCERN AND EXPOSURE POINT CONCENTRATIONS**

The methodologies used by Earth Tech to determine the COPCs are described in the following sections.

#### **7.2.1 CHEMICALS OF POTENTIAL CONCERN FOR SOIL PATHWAYS**

Earth Tech identified two soil exposure pathways that could affect residential receptors at the proposed school site: dermal contact and oral ingestion. Organic compound COPCs were identified as any organic chemicals detected at least once in soil samples. For health risk screening purposes, maximum concentrations for each chemical were selected from soil samples collected in the depth interval from ground surface to 10 feet (depths at which contact could occur). Soil sample analytical results are summarized in Appendix D. Based on the above selection criteria, a total of 17 chemicals were identified – three pesticide residues and 14 SVOCs.

Background soil samples for metals analysis were not collected at the site. Instead, metal concentrations reported in site soils were compared to background soil metals data from the Francis Polytechnical School site. This school site is located approximately 2 miles north of the site. Soils at the Francis Polytechnical School site are similar to soils at the proposed East Valley School No. 1 site for the following reasons:

- Both sites have shallow soils deposited from the Tujunga Wash alluvial fan/flood plain.
- The source of the alluvial material is the same.
- Both sites are within similar residential and commercial settings.

Therefore, metals data from the Francis Polytechnical School site are considered to be representative of background conditions within the area occupied by the proposed East Valley School No.1 site.

Earth Tech performed an evaluation of background metals in soil in accordance with the PEA Guidance Manual (DTSC, 1994 second printing 1999). Table 11 presents the maximum, and average background concentrations; and the maximum, average, and 95 percent upper confidence limit on the arithmetic mean (95% UCL) concentrations for samples collected from the proposed school site. Measured metal concentrations in soil samples from the proposed school site were considered to be within background levels if either the maximum or the average detected on-site concentrations were less than the maximum background soil concentration. Using the data provided in Table 11, all metal concentrations detected at the site were deemed to be within background concentrations. Therefore no metal COPCs were identified.

In accordance with the PEA Guidance Manual (DTSC, 1994 second printing 1999), lead should be evaluated in a PEA regardless of whether its concentrations are within background levels. However, the maximum lead concentration detected at the site (39.3 mg/kg) is significantly lower than the DTSC soil lead screening value of 255 mg/kg. Therefore, health risks posed by lead in soil at the site were not evaluated using the LeadSpread model as part of this PEA.

#### **7.2.2 CHEMICALS OF POTENTIAL CONCERN FOR THE AIR PATHWAY**

Cancer risks and non-carcinogenic health hazards for the inhalation pathway are based on either exposure to volatile emissions for VOCs or exposure to fugitive dust emissions for SVOCs and pesticides. As discussed for the soil pathway in Section 7.2.1, the COPCs selected to assess the inhalation of fugitive dust emissions were all of the SVOCs and pesticides detected at the site. In accordance with the PEA Guidance Manual (DTSC, 1994 second printing 1999), calculation of risk/hazard using either volatilization or fugitive dust adequately describes exposure to any given chemical; it is not necessary to do both. For the assessment of VOCs in breathing air, all 13 organic chemicals detected in soil-gas samples were modeled as COPCs transported from the subsurface into indoor air. The maximum detected soil gas concentrations were used as the exposure point concentrations. Maximum detected soil gas concentrations are summarized in Table 15. A complete summary of soil gas analytical results is presented in Appendix D.

## 7.3 TOXICITY VALUES

The toxicity assessment characterizes the relationship between the magnitude of exposure to a COPC and the nature and magnitude of adverse health effects that may result from such exposure. For purposes of calculating exposure criteria to be used in risk assessments, adverse health effects are classified into two broad categories — non-carcinogens and carcinogens. Toxicity values/exposure criteria are generally developed based on the threshold approach for non-carcinogenic effects and the non-threshold approach for carcinogenic effects. Toxicity values may be based on epidemiological studies, short-term human studies, subchronic or chronic animal data.

In this assessment, chronic toxicity criteria were selected (in order of preference) from the following sources: (1) Cal/EPA Cancer Potency Factors and Chronic Reference Exposure Levels, (2) U.S. EPA's Integrated Risk Information System (IRIS) and U.S. EPA Health Effects Assessment Summary Tables (HEAST), as referenced in the U.S. EPA Region IX Preliminary Remedial Goals table.

### 7.3.1 CARCINOGENIC EFFECTS

Certain chemicals are regulated as carcinogens based on the likelihood that exposure may cause cancer in humans. Numerical estimates of cancer potency for these chemicals are presented as cancer slope factors (CSFs). The CSF defines the cancer risk due to constant lifetime exposure to one unit of a carcinogen (units of risk per mg/kg-day). CSFs are derived by calculating the 95%UCL on the slope of the linearized portion of the dose-response curve using the multistage cancer model on the study data. Use of the 95%UCL of the slope means that there is only a 5% chance that the probability of a response could be greater than the estimated value for the experimental data used. This is a conservative approach and may overestimate the actual risk given that the actual risk is expected to be between zero and the calculated value. Carcinogenic slope factors assume no threshold for effect, i.e. all exposures to a chemical are assumed to be associated with some risk. Table 12 and Table 13 present the CSFs used in this assessment and the sources from which they were obtained. Preference was given first to the use of CSFs listed in the Cal/EPA Cancer Potency database. If CSFs were unavailable from Cal/EPA, then they were obtained from the federal EPA's IRIS database, and if unavailable from this source, they were obtained from the federal EPA's HEAST database as referenced in the USEPA Region IX Preliminary Remedial Goals table.

### 7.3.2 NON-CARCINOGENIC EFFECTS

For the purpose of assessing risk associated with non-carcinogenic effects, the USEPA has adopted a science policy position that protective mechanisms such as repair, detoxification, and compensation must be overcome before an adverse health effect is manifested. Therefore, a range of exposures exists from zero to some finite value (a threshold) that can be tolerated by the organism without appreciable risk of adverse effects occurring.

Non-carcinogenic effects were evaluated using reference doses (RfDs) developed by the USEPA. The RfD is a health-based criterion based on the assumption that thresholds exist for non-carcinogenic toxic effects. In general, the RfD is an estimate (with uncertainty) of a daily exposure to the human population that is likely to be without appreciable risk of chronic effects during a lifetime of exposure. RfDs are expressed as acceptable daily doses in milligrams of compound per kilogram of body weight per day (mg/kg-day). Most RfDs are based on oral exposure data. Table 12 and Table 13 present the RfDs and RfCs used in this assessment and the sources from which they were obtained. For inhalation RfDs and RfCs, preference was given first to the use of RfC values listed by Cal/EPA in their Chronic Reference Exposure Levels Database. Using these RfC values, RfDs were calculated by multiplying the RfC value by  $(20 \text{ cu m}/[70 \text{ kg} * 1,000 \text{ ug/mg}])$ .

Dermal absorption fraction values for organic chemicals in soil were taken from Table 2 of the PEA Guidance Manual (DTSC, 1994 second printing 1999).

### 7.4 SOIL GAS TO INDOOR AIR TRANSPORT MODELING

The PEA procedures do not provide a method for evaluating soil-gas results. For this PEA analysis, Earth Tech modeled VOC transport from the subsurface to indoor air using the USEPA (2001) spreadsheet program for the Johnson and Ettinger vapor intrusion model as modified by DTSC/HERD in December 2001. DTSC entitled this program the "SG-SCREEN" (soil gas screen) Version 1.0. Indoor air concentrations were modeled by Earth Tech using the maximum detected soil-gas concentrations.

The concentration of a chemical in indoor air is a function of the concentration of the chemical in the soil gas, physical/chemical properties of the chemical in the soil, attenuation factors, and the characteristics of the building. The SG-SCREEN model uses default assumptions that pertain to the building characteristics, such as its size and air exchange rate. Physical/chemical properties of the VOCs that were



not provided in the "VLOOKUP" table accompanying the model were obtained or calculated from chemical data provided on either the USEPA Region 9 Preliminary Remediation Goals website ([www.epa.gov/Region 9/waste/sfund/prg/s4](http://www.epa.gov/Region%209/waste/sfund/prg/s4)) or the National Institute of Standards and Technology (NIST) website (<http://webbook.nist.gov/chemistry/name-ser.html>). The chemicals for which physical chemistry values were supplied were: dichlorodifluoromethane; trichlorofluoromethane; 1,3,5-trimethylbenzene; and 1,2,4-trimethylbenzene.

Soil properties needed for input into the model are soil dry bulk density, total porosity and water-filled porosity. Earth Tech collected and tested three soil samples from the site to obtain site-specific data for these properties. Test results are presented in Table 8. The soil physical parameters used in the model are also presented in Table 8. Table 14 summarizes the general parameters input into the model or added to the VLOOKUP table in the model.

The EPA Johnson and Ettinger model is based on a residential scenario. The model default building was used (i.e., an enclosed space with a slab floor that is 15 centimeters [cm] thick). The model default values for space height (466 cm or 8 feet), floor-wall seam crack width (0.1 cm), and indoor air exchange rate (11.2 cu cm per sec) were used. The depth to the top of contamination was assumed to be the depth at which each soil gas sample was collected. These depths varied between 9-20 ft bgs, as shown by the last two digits of the respective soil gas sample number (column 3 in Table 15).

Two sets of soil gas data were collected at the site. One set was analyzed using EPA Method 8260 analysis. PCE was the only VOC detected using this method (max 1500 µg/cu m). The second set was analyzed using EPA Method TO-14A. Eight soil gas samples were collected and analyzed using the TO-14A Method, and 13 VOCs were detected (max. PCE was 5,789 µg/cu m). Analytical results are presented in Appendix D. Because the TO-14A method is more sensitive, higher concentrations of PCE and more analytes were detected using this method, and the 8260 Method only detected PCE, maximum detected concentrations from the TO-14A results were used for Johnson & Ettinger soil gas modeling (Table 15).

The results of the Johnson and Ettinger model using the maximum concentration of each chemical in soil gas evaluated for indoor air are based on default input parameters and the site-specific input parameters (porosity, bulk density, water-filled porosity, estimated depth to contamination, organic carbon content,

and soil permeability ). In general, using the default values will result in higher indoor air concentrations and, thus, higher incremental risks. In addition, the site-specific parameters, which are moderate to highly sensitive model variables, have the following effect on the Earth Tech model results:

- The calculated water-filled porosity based on site-specific data is considered approximately average at 0.103 cm<sup>3</sup>/cm<sup>3</sup> . The model default value is 0.30 cm<sup>3</sup>/cm<sup>3</sup>. The lower the value, the greater the effect on indoor air concentrations.
- For modeling purposes, the depth to the top of soil contamination ranged from 9-20 feet bgs based on the sample depth at which the maximum VOC concentrations were detected. The shallower the depth, the greater the effect on indoor air.
- The average measured total porosity is 0.442, which is within the range for sandy loam. The model default value is 0.43. A higher value increases indoor air concentrations.
- Average soil bulk density is 1.505 g/cm<sup>3</sup>. A higher value decreases the effect on indoor air; however, soil bulk density has low sensitivity in the model.
- Based on boring logs, the soil was evaluated on a conservative basis as a sandy loam by Earth Tech.

For a complete discussion of the model assumptions and parameters, refer to the Johnson and Ettinger model (EPA, 1997). The results of the modeling are provided in Appendix E. Table 15 summarizes the organic chemicals modeled, the chemical abstracts number for each chemical, its maximum concentration, and the sample containing the maximum concentration.

## 7.5 SOIL GAS TO OUTDOOR AIR TRANSPORT MODELING

Soil gas can migrate to outdoor air as well as to indoor air. The outdoor air pathway is a complete path and risks/hazards have been evaluated. The DTSC's PEA Guidance Manual (DTSC, 1994 second printing 1999) provides equations for estimating the emission rate and dispersion of subsurface VOCs to outdoor air. These equations were taken from an EPA Superfund guidance document, which has been revised since the PEA Guidance Manual (DTSC, 1994 second printing 1999) was published. The soil gas concentration was converted to an estimated soil VOC concentration using the following equation:

$$C_T = C_G [\theta_w + (1 - \theta_w) K_H + (K_{oc} f_{oc})] / (\rho_b K_H)$$

Where:

$C_T$  total soil concentration (ug/kg)

$C_g$	soil gas concentration (ug/L)
$\theta_w$	soil water content by volume (dimensionless)
$n$	total soil porosity (dimensionless)
$K_{H1}$	Henry's Law Constant (dimensionless)
$\rho_b$	dry bulk soil density (g/cu cm)
$K_{oc}$	organic carbon partition coefficient
$f_{oc}$	soil organic carbon content (dimensionless)

This equation was provided by the California Regional Water Quality Control Board-Los Angeles office in their Interim Guidance for Remediation of VOC Impacted Sites (January 1995). It is based on a partitioning model and relies on the fundamental assumption of chemical equilibrium between phases, and requires site-specific soil parameters. Table 15 shows the soil parameters and soil VOC concentrations calculated using the above equation. Using the PEA screening equations for VOCs in ambient air, each calculated soil VOC concentration was used to calculate the health risk and health hazard values resulting from VOC exposure by inhalation of outdoor air. The same COPCs used for indoor air modeling were also used to evaluate the outdoor air pathway.

## 7.6 RISK CHARACTERIZATION SUMMARY

The objective of this section is to integrate information developed in the toxicity assessment and the exposure assessment sections into a complete evaluation of the current and future health risks associated with COPCs detected at the site. This risk assessment evaluates the nature and degree of health risks to hypothetical residential receptors at the site. Health hazard and risk estimates are derived for each COPC as well as for the combined effects that may result from exposure to all COPCs.

### 7.6.1 HUMAN CARCINOGENIC EFFECTS

Carcinogenic risk from both soil and soil-gas is estimated as the incremental probability of an individual developing cancer over a lifetime as a result of exposure to one or more of the COPCs. The non-cancer health hazard (expressed as the hazard quotient) is estimated by comparing the estimated exposure levels

with the exposure level at which no adverse health effects are expected to occur as a result of chronic exposure (i.e., reference dose). Human health risk and hazard quotient evaluations were performed in accordance with the PEA Guidance Manual (DTSC, 1994 second printing 1999). Individual chemical cancer risks were estimated for soil using the following PEA equations:

For dermal contact and oral ingestion:

$$\text{Risk}_{\text{soil}} = (\text{SF}_o * C_s * 1.57\text{E-}06) + (\text{SF}_o * C_s * 1.87\text{E-}05 * \text{ABS})$$

Where:

SF <sub>o</sub>	=	Oral slope factor
C <sub>s</sub>	=	Concentration in soil
ABS	=	Skin absorption factor

For inhalation of outdoor air containing dust or VOCs:

$$\text{Risk}_{\text{soil}} = \text{SF}_i * C_a * 0.149$$

Where:

SF <sub>i</sub>	=	Inhalation slope factor
C <sub>a</sub>	=	Concentration in air (for dust C <sub>a</sub> =C <sub>s</sub> * 5x 10 <sup>-8</sup> ; for VOCs, C <sub>a</sub> = [(emission rate)/99] where the emission rate was calculated using the equation in Figure 2.6 of the PEA Guidance Manual

The incremental cancer risk estimated to result from accidental ingestion of soil and dermal contact is presented in Table 16. The incremental cancer risk estimated to result from inhalation of outdoor air containing dust particles impacted by site-related chemicals is presented in Table 17. The incremental cancer risk estimated to result from inhalation of outdoor air containing site-related VOCs is presented in Table 23.

A total estimated carcinogenic risk is determined by summing all of the individual cancer risks. The health risk results are compared against DTSC's screening level risk value of one in one million (1E-06) and EPA's acceptable risk range of 1E-06 to one in ten thousand (1E-04). If the total estimated risk is below 1E-06, the carcinogenic health risk to individuals under the given exposure conditions is deemed acceptable. If the estimated risk exceeds 1E-06, carcinogenic health risk to individuals under the given exposure conditions, the risk requires risk managers to balance risks with other criteria to assess the need for mitigation.



## 7.6.2 HUMAN NON-CARCINOGENIC EFFECTS

USEPA's policy regarding non-carcinogenic chemicals differs from its policy for carcinogens (USEPA, 1989). With respect to non-carcinogens, it has been postulated that for systemic toxicity effects to occur, physiological, homeostatic, compensating, and adaptive mechanisms existing in humans must first be rendered inactive prior to any manifestation of a particular toxic response. USEPA's theory for non-carcinogens is that the toxic response has a "threshold" concentration above which toxic effects may occur.

The USEPA has established reference doses for several of the non-carcinogenic COPCs, which represent the dose of the chemical not expected to result in adverse health effects, even over a lifetime of exposure.

Individual chemical non-carcinogen hazard quotients for soil were estimated using the following equations:

For dermal contact and oral ingestion:

$$\text{Hazard}_{\text{soil}} = (C_s/\text{RfD}_o * 1.28 \times 10^{-5}) + (C_s/\text{RfD}_o * 1.28 \times 10^{-4} * \text{ABS})$$

Where:

$C_s$	=	Concentration in soil
$\text{RfD}_o$	=	Oral reference dose
ABS	=	Skin absorption factor

For inhalation of outdoor air containing dust or VOCs:

$$\text{Hazard}_{\text{soil}} = (C_a/\text{RfD}_i) * 0.639$$

Where:

$C_a$	=	Concentration in air
$\text{RfD}_i$	=	Inhalation reference dose

A hazard index was calculated as the sum of all hazard quotients. If the non-carcinogenic hazard index is less than 1.0, the non-carcinogenic health hazard to individuals under the given exposure conditions is deemed acceptable.

The hazard index estimated to result from accidental ingestion of soil and dermal contact is presented in Table 18. The hazard quotient estimated to result from inhalation of outdoor air containing dust particles

impacted by site-related chemicals is presented in Table 19. The hazard quotient estimated to result from inhalation of outdoor air containing VOCs is presented in Table 24.

### **7.6.3 SOIL RISK CHARACTERIZATION**

The total incremental cancer risk for hypothetical residential exposure to soil through direct contact (including incidental ingestion, dermal contact and inhalation of dust particles) was estimated to be  $8\text{E-}04$  (Table 20). The chemicals that contributed to more than 99.9 percent of the estimated incremental cancer risk were the carcinogenic PAHs detected in soil sample SB-21-0.5. The lateral extent of PAH impacted soil seems to be very limited as only one of 77 samples collected at the site contained detectable concentrations of SVOCs. In addition, factors, such as the presence of asphalt or buildings at the proposed school (which reduce the potential for soil contact) or the likely removal of shallow soil during the demolition and construction phase of the project, are not considered when calculating health risk.

The estimated hazard index for hypothetical onsite receptors is presented in Table 20. The total hazard index for hypothetical residential exposure to site-related chemicals was estimated to be  $2.7\text{E-}02$ . The estimated hazard index for the site is estimated to be below 1.0, the benchmark level for non-cancer effects.

### **7.6.4 SOIL-GAS RISK CHARACTERIZATION**

To estimate health risks to individuals from exposure to indoor air, Earth Tech calculated the cancer risks and hazard quotients potentially resulting from exposure to organic compounds detected in soil gas. The organic chemicals listed in Table 15 were modeled using the Johnson & Ettinger soil screening program at the maximum concentrations detected in soil-gas samples. The Johnson & Ettinger model is a mathematical screening-level model that incorporates both convective and diffusive mechanisms for estimating the transport of contaminant vapors emanating from either subsurface soils or groundwater into indoor spaces located directly above or in close proximity to the source of contamination.

The total cancer risk and hazard index associated with exposure to affected indoor air were calculated to be  $4.2\text{E-}07$  (Table 21) and  $7.8\text{E-}03$  (Table 22), respectively. The total hazard index for this pathway is below the level of regulatory concern (i.e., 1.0). The cancer risk is also lower than the DTSC maximum risk criterion of  $1\text{E-}6$ . Also note that the use of the maximum detected soil gas concentrations provides a conservative estimate of associated cancer risks and health hazards. Furthermore, assuming that a

resident resides at the site 24 hours per day for 30 years also provides a conservative estimate of the chemical exposure. Johnson & Ettinger model outputs are presented in Appendix E.

In addition to the risks from soil gas to indoor air, the effect of soil gas to outdoor air was also calculated. The cancer risks and health hazards due to inhalation of VOCs in outdoor air were calculated using equations from the PEA Guidance Manual as described in Sections 8.6.1 and 8.6.2 and calculated VOC concentrations in soil. The VOC concentrations in soil were derived using soil gas VOC concentrations as described in Section 7.4.

For all analytes modeled, the risk due to inhalation of outdoor air was approximately an order of magnitude smaller than the risk due to inhalation of indoor air. The hazard due to inhalation of outdoor air is also approximately an order of magnitude smaller than the hazards due to inhalation of indoor air. These results are summarized in Table 23 and Table 24.

Table 23 shows that the estimated cancer risk due to inhalation of VOCs in outdoor air was  $2.2\text{E-}9$ . This value is below the de minimus level of concern of  $1\text{E-}6$ . Table 24 shows the estimated health hazard indices due to inhalation of VOCs in outdoor air was  $1.2\text{E-}3$ . This value is also below the de minimus level of concern of 1.0. Therefore, the health hazards and cancer risks associated with inhalation of VOCs in outdoor air appeared to be negligible.

#### **7.6.5 CUMULATIVE RISK AND HAZARD**

Cumulative potential risks from soil and soil-gas exposure were calculated by summing all pathways (Table 25). The total cancer risk is  $8\text{E-}4$  at the proposed school site, which exceeds the de minimis acceptable criteria of  $1\text{E-}6$ . As explained in Section 7.6.3, this value resulted primarily from the concentration of PAHs in one shallow soil sample. Without this result, the total site cancer risk would be less than the maximum DTSC acceptable incremental cancer risk level of  $1\text{E-}6$ . Note that the modeled risk is based on the maximum detected concentrations in soil and soil-gas samples rather than an estimate of the average concentrations and therefore provides a conservative estimate of health risk.

The cumulative site hazard index (HI) is  $3.67\text{E-}02$ , which is below the target HI of 1.0. Therefore, the likelihood that one would experience non-carcinogenic adverse health effects due to exposure to on-site chemicals is negligible.

## **7.7 UNCERTAINTY ANALYSIS**

As stated in the PEA Guidance Manual, the purpose of the human health screening evaluation is not to predict individual health risks but to provide risk managers with an estimate of potential chronic health hazards from chemicals at the site. As a result, the estimated risk values involve uncertainties that reflect the modeled COPC concentrations and the assumptions made for model input variables such as exposure duration, intake rates, calculated exposure concentrations in indoor and outdoor air, soil type and associated site-specific physical parameters. If information was incomplete, conservative values were selected for input into the calculations to estimate cancer risks and non-carcinogenic health hazards. For these reasons, results of a PEA typically overestimate risk/hazards. Actual risks and hazards are likely to be much lower, depending on the actual receptor exposures and land uses. Hence, estimated health risks in this document are expected to be protective of human health.

## **7.8 UNCERTAINTIES ASSOCIATED WITH COPCS**

It was assumed that all detected pesticides, PAHs, SVOCs and VOCs were COPCs because they were likely derived from human activities. Hence, their natural background concentrations are assumed to be nil. However, PAHs, SVOCs and VOCs may be present in site media as a result of non-site related urban activities. The maximum detected concentration of each analyte in soil and soil gas was assumed to be representative of concentrations throughout the site. A more accurate representative concentration would be the average concentration, or the 95% upper confidence limit (UCL) on the mean. Use of the highest concentration is thus a conservative assumption that results in an overestimation of associated health risks.

The equation in Section 7.5 that was used to convert soil gas VOC concentrations to soil VOC concentrations derives a ratio of the volume within soil that soil gas can occupy and multiplies this ratio by the soil gas VOC concentration to derive the soil VOC concentration. This equation assumes that within the soil matrix, VOCs bound to soil particles, VOCs in the vapor phase and VOCs dissolved in soil water are in equilibrium. A number of field research reports were conducted to evaluate the validity of the model, and results have been mixed. Hence, it is unclear whether this calculation leads to a more or less conservative estimate of soil VOC concentrations. Risk estimates due to inhalation of outdoor air containing VOCs is thought to be conservative because of the assumed extended exposure duration as discussed in Section 7.7.3 below.



### **7.8.1 UNCERTAINTIES INVOLVING TOXICITY FACTORS**

As discussed in Sections 8.6.1 and 8.6.2, cancer slope factors and non-carcinogenic reference doses are derived from toxicity experiments using laboratory animals. Extrapolation of toxicity factors derived from animal tests for use in deriving health risk estimates for humans involve several assumptions that make the resulting risk estimates conservative. These assumptions generally involve dividing the toxicity value derived from animal studies by factors of 10 to account for each of the following differences in: (a) toxic response between test animals and humans, (b) susceptibility between individuals within the human population, (c) using non-chronic data to estimate chronic toxicity responses, and (d) use of the Lowest Observable Adverse Effect Level (LOAEL) instead of a No Observable Adverse Effect Level (NOAEL) to estimate the threshold for a reference dose. In addition, modification factors are also divided into toxicity values to account for differences in metabolism and/or the mechanism of toxicity of a xenobiotic between test animals and humans. Therefore, the cancer slope factors and non-carcinogenic reference doses used to derive human health risk estimates are themselves derived using conservative assumptions.

### **7.8.2 UNCERTAINTIES INVOLVING ESTIMATED EXPOSURE CONCENTRATIONS**

In addition to using the highest detected concentrations as representative exposure concentrations, additional exposure assumptions make the risk estimates derived in this document conservative. For example, use of the residential exposure scenario assumes that a child is raised on-site for the first six years of his life, and then lives on-site as an "adult" for the next 24 years of his life. This is a conservative assumption because it assumes an exposure period of 24 hours per day, 365 days per year for a total of 30 years. A more realistic exposure for the proposed school site would be 6-8 hours per day for "adult" students (i.e., seven years of age and older) for a total of three years, and eight hours per day for 191 days per year for 30 years for teachers and administrators.

To estimate risks due to soil ingestion exposures, algorithms in the PEA Guidance Manual assume that a child will ingest 0.2 grams soil per day. Analogous assumptions are made to estimate dermal exposures. These assumptions are conservative because the site will be landscaped, and little, if any, exposure to soil should occur. In addition, most of the time that a receptor spends on-site will be indoors. Hence, it is anticipated that the assumptions used to estimate chemical exposures in this risk assessment are conservative.

The Johnson & Ettinger soil screening program was used to estimate VOC concentrations in indoor air. This model assumes that VOCs diffuse upwards from subsurface soils and enter buildings through cracks in the foundation due to a slight negative pressure indoors that is created by outside air movement. The model assumes default values for a hypothetical building perimeter, area of the foundation below grade, and the foundation crack area. It uses soil properties and chemical properties of each contaminant to estimate the vapor influx rate into the hypothetical building. It is unclear whether such assumptions result in conservatively high or low health risk estimates. The best way to evaluate the conservative nature of the model is to compare modeling results with actual field measurements. This model also assumes a 350 day per year for 30 year exposure duration. As discussed above, this is a conservative assumption that leads to higher risk estimates.

### **7.8.3 UNCERTAINTIES ASSOCIATED WITH THE CUMULATIVE SITE RISK ESTIMATE**

The cumulative site cancer risk of  $8.0E-4$  was due solely to hypothetical exposures to PAHs (Table 25). As discussed in Section 7.6.3, estimated PAH exposure point concentrations were based on test results from a single soil sample, SB-21-0.5. Hence, the PAH concentrations used for deriving risk estimates were not representative of overall site conditions. Step-out borings installed around SB-21-0.5 revealed much lower PAH concentrations. Therefore, site health risks estimated based on PAH exposures are overly conservative.

Without the risk contributed by the PAHs, the overall site risk is approximately  $9.6E-07$ . This value was derived based on estimated exposures to pesticides in soil and VOCs in indoor air. As discussed above, the exposure duration and toxicity value assumptions used to derive this risk estimate are conservative. This risk value overestimates the actual site health risk. Because the risk value of  $9.6E-07$  is lower than the regulatory benchmark of  $1E-6$  for school sites, and is a conservative estimate, it appears that the incremental cancer risk due to inhalation of VOCs at the site is insignificant.

- TPH was detected at low to trace concentrations in one boring (SB-6) at five and nine feet bgs. The concentrations of TPH detected are not considered to be a concern.
- PCBs were not detected at the site.
- The concentration of pH ranged from 4.12 to 5.84.

#### 13.1.4 HUMAN HEALTH SCREENING EVALUATION

A total of 30 chemicals were identified as COPCs in soil and soil gas at the site. These COPCs were evaluated in the human health screening evaluation.

Using maximum COPC concentrations detected at the site, a total incremental cancer risk for hypothetical residential exposure to soil through direct contact (including incidental ingestion, dermal contact and inhalation of dust particles) was estimated to be  $8\text{E-}04$ . The chemicals that contributed to more than 99.9 percent of the estimated incremental cancer risk were the carcinogenic PAHs detected in soil sample SB-21-0.5. The lateral extent of PAH impacted soil seems to be very limited as only one of 77 samples collected at the site contained detectable concentrations of PAHs.

The total hazard index for hypothetical residential exposure to soil through direct contact (including incidental ingestion, dermal contact and inhalation of dust particles) was estimated to be  $2.7\text{E-}02$ . The estimated hazard index for the site is below 1.0, the benchmark level for non-cancer effects.

The total cancer risk and hazard index associated with exposure to VOC-impacted indoor air were calculated to be  $4.2\text{E-}7$  and  $7.8\text{E-}03$ , respectively. The cancer risk is lower than the DTSC risk criterion of  $1\text{E-}6$ . The total hazard index for this pathway is below the level of regulatory concern (i.e., 1.0).

The use of the maximum detected soil gas concentrations provides a conservative estimate of associated cancer risks and health hazards. Furthermore, assuming that a resident resides at the site 24 hours per day for 30 years also provides a conservative estimate of the chemical exposure.

For all analytes modeled, the risk due to inhalation of outdoor air was approximately three orders of magnitude smaller than the risk due to inhalation of indoor air. The hazard index due to inhalation of outdoor air was more than an order of magnitude smaller than the hazard index due to inhalation of indoor air. The estimated cancer risk due to inhalation of VOCs in outdoor air was  $2.2\text{E-}9$ . This value is below the cancer risk criterion of  $1\text{E-}6$ . The estimated total health hazard index due to inhalation of VOCs in outdoor air was  $1.2\text{E-}3$ . This value is also below the level of concern of 1.0.

Cumulative potential risks from soil and soil-gas exposure were calculated by summing all pathways. The total cancer risk is  $8\text{E-}4$  at the proposed school site, which exceeds the acceptable criteria of  $1\text{E-}6$ . If the PAHs data from SB-21-0.5 were removed, the total site cancer risk would be less than the cancer risk criterion of  $1\text{E-}6$ . Note that the modeled risk is based on the maximum detected concentrations in soil and soil-gas samples rather than an estimate of the average concentrations and therefore provides a conservative estimate of health risk. The cumulative site hazard index is  $3.67\text{E-}02$ , which is below the target hazard index of 1.0.

### **13.2 RECOMMENDATIONS**

Based on the concentrations of PAHs detected in soil sample SB-21-0.5, additional assessment to determine the distribution and occurrence of elevated SVOCs should be conducted in the form of a supplemental site investigation (SSI). Results of the SSI will be summarized in a SSI Report with recommendations for either remedial action or no further action. Based on the results of this PEA, no further action for the remainder of the site should be required.



Table 8  
Summary of Soil Analytical Data - Physical Properties  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Methods: ASTM D2216, API RP40, ASTM D5084, EPA 9060B										25.0 PSI Confining Stress	
Sample ID	Sample Orientation (1)	Moisture Content (% wt)	Density		Porosity, %Vb (2)		Pore Fluid Saturations, % Pv (3)		Total Organic Carbon (mg/kg)	Native State Effective Permeability to Water (5) (millidarcy)	Native State Effective Hydraulic Conductivity (5) (cmfs)
			Bulk (g/cc)	Grain (g/cc)	Effective	Air Filled	Water	Hydrocarbon			
SB-9-Physical	V	7.1	1.38	2.69	48.7	38.3	21.3	ND<0.1	1800	28.2	2.66E-05
SB-12-Physical	V	5.3	1.50	2.68	43.9	35.6	18.9	ND<0.1	7300	336	3.04E-05
SB-16-Physical	V	6.0	1.49	2.69	44.6	35.3	21.0	ND<0.1	1400	32.6	3.15E-04
SB-29-Physical	V	9.0	1.65	2.72	39.5	24.4	36.2	2.5	500	203	1.90E-04
Average Values		6.850	1.505	2.695	44.175	33.4			2750	149.95	1.41E-04
Converted	Bulk Density (g/cm³)	Soil Total Porosity (unitless)	Moisture Content (unitless)	Grain Density (g/cm³)	Soil Water filled Porosity	Air-filled Porosity	Fraction Organic Carbon	Soil Vapor Permeability (cm³)			
Parameter Value	1.505	0.442	0.0685	2.695	0.103	0.339	0.0028	1.87E-09			
Conversion		n/100	MC/100		(1-n)(w)(G) or (n <sup>v</sup> - qv)	(n - qm)	(Toc / 10 <sup>6</sup> )				

Table 14  
Source of Inputs Used for the Johnson and Ettinger  
Soil Gas Vapor Intrusion Model  
East Valley Middle School  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Input Parameter	Value	Source of Value
Depth below grade to bottom of enclosed space floor	15 cm	J&E Default value
Soil gas sampling depth below grade	274-609 cm	Specific for identified contaminants (last digits of sample # are ft bgs)
Avg soil temperature	20.2 °C	Measured site data
Predominant vadose zone SCS soil type	Loamy Sand (LS)	Averaged from boring logs for borings $\geq 10$ ft depth (Appendix A)
Soil dry bulk density	1.505 g/cu cm	Measured physical soils site data (Appendix B)
Soil total porosity	0.442	Measured physical soils site data (Appendix B)
Soil water-filled porosity	0.103	Measured physical soils site data (Appendix B)
Toxicity values	$R_f C_{inh}$ or $URF_{inh}$	OEHHA and IRIS values as shown on enclosed VLOOKUP Table
Physical chemical properties of analytes	varies	Determined from VLOOKUP Table and NIST website

Table 21  
Incremental Cancer Risk Estimated for Exposure to Soil Gas VOCs in  
Indoor Air  
Hypothetical On-Site Residential Receptors  
East Valley Middle School  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Chemical	Maximum Soil Gas Concentration (ug/cu m)	Inhalation Cancer Unit Risk Factor (URFi) [ug/cu m] <sup>-1</sup>	Inhalation Cancer Risk (unitless)
<i>Soil Gas VOCs</i>			
Dichlorodifluoromethane	75.38	NA	NA
Trichlorofluoromethane	171.30	NA	NA
1,1,1-Trichloroethane	7.76	NA	NA
Benzene	6.17	2.90E-05	2.23E-09
Toluene	99.58	NA	NA
Trichloroethene	20.74	2.00E-06	5.13E-10
Tetrachloroethene	5789.58	5.90E-06	4.20E-07
Ethylbenzene	295.65	NA	NA
p/m Xylene	1147.31	NA	NA
Styrene	11.93	NA	NA
o-Xylene	485.40	NA	NA
1,3,5-Trimethylbenzene	139.88	NA	NA
1,2,4-Trimethylbenzene	1848.46	NA	NA
<b>TOTAL INCREMENTAL CANCER RISK</b>			<b>4.2E-07</b>

Notes:

VOCs = volatile organic compounds

ug/cu m = micrograms per cubic meter

NA = not applicable

Table 22  
Health Hazards Estimated for Inhalation of Soil Gas VOCs in Indoor Air  
Hypothetical On-Site Residential Receptors  
East Valley Middle School  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Chemical	Maximum Soil Gas VOC Concentration (ug/cu m)	Chronic Inhalation Reference Concentration (RfC) (mg/cu m)	Inhalation Hazard Quotient (unitless)
<i>Soil VOCs</i>			
Dichlorodifluoromethane	75.38	2.00E-01	1.1E-05
Trichlorofluoromethane	171.30	7.00E-01	7.1E-06
1,1,1-Trichloroethane	7.76	1.00E+00	2.2E-07
Benzene	6.17	6.00E-02	3.0E-06
Toluene	99.58	3.00E-01	9.6E-06
Trichloroethene	20.74	6.00E-01	1.0E-06
Tetrachloroethene	5789.58	3.50E-02	4.8E-03
Ethylbenzene	295.65	2.00E+00	4.3E-06
p/m Xylene	1147.31	7.00E-01	4.7E-05
Styrene	11.93	9.00E-01	9.8E-06
o-Xylene	485.40	7.00E-01	2.0E-05
1,3,5-Trimethylbenzene	139.88	6.00E-03	5.8E-06
1,2,4-Trimethylbenzene	1848.46	6.00E-03	3.0E-03
<b>TOTAL HEALTH HAZARD</b>			<b>7.8E-03</b>

Notes:

VOCs = volatile organic compounds  
ug/cu m = micrograms per cubic meter  
mg/cu m = milligrams per cubic meter



Table 25  
Summarized Total Site Cancer Risks and Health Hazards  
East Valley Middle School  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

COPC Class	Cancer Risk Ingestion/Dermal Pathway	Cancer Risk Inhalation Pathway	Health Hazard Ingestion/Dermal Pathway	Health Hazard Inhalation Pathway
Pesticides	1.78E-08	6.22E-11	6.30E-04	1.20E-06
SVOCs	8.04E-04	5.20E-07	2.70E-02	2.69E-05
VOCs (ambient)	NA	2.20E-09	NA	1.20E-03
VOCs (indoor)	NA	4.23E-07	NA	7.82E-03
Subtotal Risks/Hazards	8.04E-04	9.45E-07	2.76E-02	9.05E-03
Total Site Cancer Risk or Health Hazard	8.05E-04		3.67E-02	

**Notes:**

NA = Not applicable

**APPENDIX B**  
**BORING LOGS**

## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-1	
Borehole Location: N. parking lot, under transformer		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: Truck mounted Geoprobe		Date Started: 1/25/2002		Total Depth (feet): 3.0	
Drilling Method: Direct Push		Number of Samples: 3		Date Finished: 1/25/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): Drilling: Static: NA	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL):	
				Logged By: L. Browne	
				Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks	
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic			USCS or Rock Type
	SB-1 -1	<div></div>			1206		0		<div></div>	SM	ASPHALT; parking lot	Start @ 1205
	SB-1 -3	<div></div>		100	1210		0		<div></div>		SILTY SAND; Medium brown, 65% sand (coarse to fine), 35% silt, moist, micaceous, no odor.	Duplicate sample (SB-1-3-DUP) taken
5												
10												
15												
20												
25												
30												

## Borehole Log





Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-2	
Borehole Location: Immediately South of waste oil tank		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: portable GH-40 Geoprobe		Date Started: 1/24/2002		Total Depth (feet): 5.0	
Drilling Method: Direct Push		Number of Samples: 3		Date Finished: 1/24/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): Drilling: Static: NA	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL):	
				Logged By: L. Browne	
				Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic		
5	SB-2		100	1042		0				SM	CONCRETE; pad SILTY SAND; Medium brown, 70% sand (medium to fine), 30% silt, trace gravel, dense, moist, micaceous, no odor.
	-2										
	SB-2										
	-3										
SB-2		100	1044	0				SW	SILTY SAND; Medium brown, 60% fine sand, 40% silt, dense, moist, micaceous, no odor. SAND; Light brown, 90% sand (coarse to fine), 10% silt, trace gravel, loose, well graded, moist, micaceous, no odor.		
-5											
10											
15											
20											
25											
30											



## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-3	
Borehole Location: Immediately North of waste oil tank		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: portable GH-40 Geoprobe		Date Started: 1/24/2002		Total Depth (feet): 5.0	
Drilling Method: Direct Push		Number of Samples: 2		Date Finished: 1/24/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): <i>Drilling:</i> <i>Static: NA</i>	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL):	
				Logged By: L. Browne      Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks	
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic			USCS or Rock Type
	SB-3-2			100	1052		0			SM	CONCRETE; pad	Start @ 1050
5	SB-3-5			100	1056		0			SW	SAND; Light Brown, 90% sand (coarse to fine), 10% silt, trace gravel, loose, moist, micaceous, no odor.	
10												
15												
20												
25												
30												

[illegible]



## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-5	
Borehole Location: Southern boundary of former UST area				Northing: Easting: Sheet 1 of 1	
Drilling Agency: EST			Driller: Alex Chapman		
Drilling Equipment: Truck mounted Geoprobe			Date Started: 1/25/2002	Total Depth (feet): 15.0	
Drilling Method: Direct Push		Number of Samples: 4	Date Finished: 1/25/2002	Depth to Bedrock (feet):	
Drilling Fluid: None		Borehole Diameter (in): 2	Depth to Water (feet): Drilling: Static: NA		
Completion Information: Backfilled with bentonite and capped with concrete			Elevation (feet MSL):		
			Logged By: L. Browne		Checked By: Steve Williams, R.G.

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic	USCS or Rock Type	
5	SB-5-5			100	1315		0			SP-SM ASPHALT: driveway SILTY SAND, poorly graded; Medium Brown, 70% sand (medium to fine), 30% silt, dense, moist, micaceous, no odor.	Start @ 1308 Acetate sleeve
10	SB-5-10			100	1320		0			SW SAND, well graded; Light brown, 85% sand (medium to fine), 10% silt, 5% gravel (sub-angular), loose, moist, micaceous, no odor.	Acetate sleeve
										SP-SM SILTY SAND, poorly graded; Light brown, 70% sand (medium to fine), 30% silt, poor recovery, moist, micaceous, no odor.	Acetate sleeve
15	SB-5-15			100	1332		0			SP SAND, poorly graded; Light brown, 85% sand (coarse to fine), 15% silt, trace gravel, loose, moist, micaceous, no odor.	
20											
25											
30											

## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-6	
Borehole Location: Within former UST area		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: Truck mounted Geoprobe		Date Started: 1/25/2002		Total Depth (feet): 9.0	
Drilling Method: Direct Push		Number of Samples: 2		Date Finished: 1/25/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): Drilling: Static: NA	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL) :	
				Logged By: L. Browne	
				Checked By: Steve Williams, R.G.	

Depth (feet)	Samples			Field Analyses			Log		Lithologic Description	Remarks	
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests			Graphic
5	SB-6-5	X		100	0813		0				Start @ 0804
	SB-6-9	X		100	0819		0				
10										CONCRETE; Four holes here, all refused @ 9' - planar feature	Refusal
15											
20											
25											
30											



## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-7	
Borehole Location: Northern boundary		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: Truck mounted Geoprobe		Date Started: 1/25/2002		Total Depth (feet): 15.5	
Drilling Method: Direct Push		Number of Samples: 6		Date Finished: 1/25/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): Drilling: Static: NA	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL):	
				Logged By: L. Browne	
				Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic	USCS or Rock Type	
5	SB-7-5	X		100	0742		0			SM	Start @ 0736
10	SB-7-10	X		100	0750		0			SW	Duplicate sample SB-7-5-DUP taken
15	SB-7-15	X		100	0800		0			SW	Duplicate sample SB-7-10-DUP taken
20											
25											
30											

# Borehole Log

Project Name: LAUSD-EVMS				Project Number: 53306				Borehole Number: SB-8			
Borehole Location: Clarifier at entrance to battery service area								Northing: Easting: Sheet 1 of 1			
Drilling Agency: EST				Driller: Alex Chapman							
Drilling Equipment: Truck mounted Geoprobe				Date Started: 1/25/2002				Total Depth (feet): 15.0			
Drilling Method: Direct Push				Number of Samples: 5				Date Finished: 1/25/2002			
Drilling Fluid: None				Borehole Diameter (in): 2				Depth to Water (feet): Drilling: Static: NA			
Completion Information: Backfilled with bentonite and capped with concrete								Elevation (feet MSL):			
								Logged By: L. Browne			
								Checked By: Steve Williams, R.G.			

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks	
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic			USCS or Rock Type
0											CONCRETE: pad	Start @ 0830
5	SB-8-5	X		100	0840		0			ML	SILT; Medium brown, 70% silt, 30% fine sand, dense, moist, micaceous, no odor.	Duplicate sample SB-8-5-DUP taken
10	SB-8-10	X		100	0848		0			SP	SAND, poorly graded; Light brown, 90% sand (medium to fine), 10% silt, loose, moist, micaceous, no odor.	Duplicate sample SB-8-10-DUP taken
15	SB-8-15	X		100	0855		0			SM	SILTY SAND; Medium brown, 70% sand (medium to fine), 30% silt, dense, moist, micaceous, no odor.	
20												
25												
30												

EATB Bore[SB]Clarifier at entrance to battery service area[LAUSD-EVMS]53306

## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-9	
Borehole Location: Western service bay		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: portable GH-40 Geoprobe		Date Started: 1/24/2002		Total Depth (feet): 12.0	
Drilling Method: Direct Push		Number of Samples: 4		Date Finished: 1/24/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): <i>Drilling:</i> <i>Static: NA</i>	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL):	
				Logged By: L. Browne	
				Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks	
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic			USCS or Rock Type
0.5	SB-9-0.5	X		100	1124		0			SM	CONCRETE; pad SILTY SAND; Medium brown, 70% sand (medium to fine), 30% silt, trace gravel, dense, moist, micaceous, no odor.  SAND, well graded; Light brown, 85% sand (coarse to fine), 15% silt, trace gravel, loose, moist, micaceous, no odor.	Start @ 1120 Sample SB-9-Physical taken for physical testing
5	SB-9-7	X		100	1127		0			SW		
10	SB-9-10	X		0	1133		0					
	SB-9-12	X			1139		0					
15												
20												
25												
30												

EAFB Bore/Sail/Western service bn/1AUSD-EVMS\$533.06



## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-11	
Borehole Location: Western service bay		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: portable GH-40 Geoprobe		Date Started: 1/23/2002		Total Depth (feet): 12.0	
Drilling Method: Direct Push		Number of Samples: 4		Date Finished: 1/23/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): Drilling: Static: NA	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL):	
				Logged By: L. Browne	
				Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic	USCS or Rock Type	
0	SB-11	X			1236		0			SM	CONCRETE, pad
0.5		X		100							SILTY SAND; Medium brown, 70% sand (medium to fine), 25% silt, 5% gravel, moist, micaceous, no odor.
5											
7	SB-11	X		100	1238		0			SP	SAND, poorly graded; Light brown, 80% sand (coarse to fine), 20% silt, moist, micaceous, no odor.
10											
10	SB-11	X			1242		0			SP	SAND, poorly graded; Light brown, 90% sand (medium to fine), 10% silt, moist, micaceous, no odor.
10	SB-11	X		100	1244		0			SW	SAND, well graded; Light brown, 70% sand (medium to fine), 20% gravel (angular to subangular), 10% silt, moist, micaceous, no odor.
11											
12											
15											
20											
25											
30											

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic		
SB-12-0.5	X		100	0650		0			SP-SM	CONCRETE, pad SILTY SAND, poorly graded; Medium brown, 65% sand (medium to fine), 35% silt, dense, moist, micaceous, no odor.	Start @ 0645 Sample SB-12-Physical taken for physical testing.
SB-12-7	X		100	0654		0			SW	SAND, well graded; Light brown, 95% sand (coarse to fine), 5% silt, trace gravel, loose, moist, micaceous, no odor.	
SB-12-10	X		100	0659		0			SW	SAND, well graded; Light brown, 90% sand (medium to fine), 10% silt, trace gravel, dense, moist, micaceous, no odor.	
SB-12-12				0704		0			SP-SM	SILTY SAND, poorly graded; Medium brown, 60% sand (medium to fine), 40% silt, dense, moist, micaceous, no odor.	

## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-13	
Borehole Location: Western service bay		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: portable GH-40 Geoprobe		Date Started: 1/23/2002		Total Depth (feet): 12.0	
Drilling Method: Direct Push		Number of Samples: 4		Date Finished: 1/23/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): Drilling: Static: NA	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSI.):	
				Logged By: L. Browne	
				Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks	
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic			USCS or Rock Type
0.5	SB-13-0.5	X		100	1135		0			SM	CONCRETE; pad	Start @ 1130
											SILTY SAND; Medium brown, 70% sand (medium to fine), 30% silt, moist, micaceous, no odor.	
5												
7	SB-13-7	X		100	1140		0			SP	SAND, poorly graded; Light brown, 85% sand (medium to fine), 15% silt, loose, moist, micaceous, no odor.	
10	SB-13-10	X			1142		0			SP	SAND, poorly graded; Light brown, 85% sand (medium to fine), 15% silt, loose, moist, micaceous, no odor.	
	SB-13-12			100	1145		0			SP-SM	SAND, poorly graded; Light brown, 85% sand (medium to fine), 15% silt, loose, moist, micaceous, no odor.	
											SILTY SAND, poorly graded; Medium brown, 65% fine sand, 35% silt, dense, moist, micaceous, no odor.	
15												
20												
25												
30												

## Borehole Log

Project Name: LAUSD-EVMS				Project Number: 53306		Borehole Number: SB-14	
Borehole Location: Western service bay				Northing:		Easting:	
Drilling Agency: EST				Driller: Alex Chapman			
Drilling Equipment: Truck mounted Geoprobe				Date Started: 1/28/2002		Total Depth (feet): 12.0	
Drilling Method: Direct Push		Number of Samples: 4		Date Finished: 1/28/2002		Depth to Bedrock (feet):	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet):		Drilling: Static: NA	
Completion Information: Backfilled with bentonite and capped with concrete						Elevation (feet MSL):	
						Logged By: L. Browne	
						Checked By: Steve Williams, R.G.	

Depth (feet)	Samples			Field Analyses			Log		Lithologic Description	Remarks		
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests			Graphic	USCS or Rock Type
0	SB-14-0.5			100	0803		0			SP-SM	CONCRETE; pad	Start @ 0759
5				75	0805							Acetate sleeve
10	SB-14-7			100	0808		0			SW	SAND, well graded; Medium brown, 75% sand (coarse to fine), 20% silt, 5% gravel, moist, micaceous, no odor.	
15				100	0810					SP	SAND, poorly graded; Light brown, 85% sand (medium to fine), 15% silt, trace gravel, loose, moist, micaceous, no odor.	Acetate sleeve
20	SB-14-10				0816		0					
25	SB-14-12				0818		0					
30												



## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-15	
Borehole Location: Western service bay		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: portable GH-40 Geoprobe		Date Started: 1/24/2002		Total Depth (feet): 12.0	
Drilling Method: Direct Push		Number of Samples: 4		Date Finished: 1/24/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): Drilling: Static: NA	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL):	
				Logged By: L. Browne	
				Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks	
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic			USCS or Rock Type
0	SB-15-0.5	X		100	0912		0			SM	CONCRETE; pad	Start @ 0910
5	SB-15-7	X		100	0914		0			ML	SILT; Medium brown, 60% silt, 40% sand (medium to fine), trace wood fragments, dense, moist, micaceous, no odor.	
10	SB-15-10	X		100	0918		0			SP	SAND, poorly graded; Light brown, 85% sand (medium to fine), 15% silt, loose, moist, micaceous, no odor.	
	SB-15-12				0925		0			SW	SAND, well graded; Light brown, 85% sand (coarse to fine), 15% silt, trace gravel, loose, moist, micaceous, no odor.	
15												
20												
25												
30												

## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-16	
Borehole Location: Western service bay		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: portable GH-40 Geoprobe		Date Started: 1/24/2002		Total Depth (feet): 12.0	
Drilling Method: Direct Push		Number of Samples: 5		Date Finished: 1/24/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): Drilling: Static: NA	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL):	
				Logged By: L. Browne	
				Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic	USCS or Rock Type	
0	SB-16-0.5	X		100	0835		0			SM	CONCRETE; pad
5	SB-16-7	X		100	0840		0			ML	SILT; Medium brown, 65% silt, 35% sand (medium to fine), trace gravel, dense, moist, micaceous, no odor.
10	SB-16-10	X		100	0845		0			SP	SAND, poorly graded; Light brown, 85% sand (medium to fine), 15% silt, loose, moist, micaceous, no odor.
12	SB-16-12	X			0850		0			SW	SAND, well graded; Light brown, 90% sand (coarse to fine), 10% silt, trace gravel., loose, moist, micaceous, no odor.
15											
20											
25											
30											

## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-17	
Borehole Location: Western service bay		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: portable GH-40 Geoprobe		Date Started: 1/24/2002		Total Depth (feet): 12.0	
Drilling Method: Direct Push		Number of Samples: 4		Date Finished: 1/24/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Bedrock (feet):	
Completion Information: Backfilled with bentonite and capped with concrete		Depth to Water (feet):		Drilling: Static: NA	
		Elevation (feet MSL):			
		Logged By: L. Browne		Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks	
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic			USCS or Rock Type
SB -17 -0.5		X		100	0759		0			SM	CONCRETE; pad	Start @ 0755
5		X										
SB -17 -7		X		100	0803		0			SW	SAND, well graded; Light brown, 70% sand (coarse to fine), 20% subangular gravel, 10% silt, loose, moist, micaceous, no odor.	
10		X										
SB -17 -10		X			0810		0			SW	SAND, well graded; Light brown, 90% sand (coarse to fine), 5% subangular gravel, 5% silt, loose, moist, micaceous, no odor.	
SB -17 -12		X		100	0812		0					
15												
20												
25												
30												

## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-18	
Borehole Location: Western service bay		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: portable GH-40 Geoprobe		Date Started: 1/24/2002		Total Depth (feet): 12.0	
Drilling Method: Direct Push		Number of Samples: 4		Date Finished: 1/24/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): Drilling: Static: NA	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL):	
				Logged By: L. Browne	
				Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks	
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic			USCS or Rock Type
	SB-18-0.5			100	0717		0			SM	CONCRETE; pad	Start @ 0713
											SILTY SAND; Medium brown, 60% sand (medium to fine), 40% silt, trace gravel, dense, moist, micaceous, no odor.	
5	SB-18-7			100	0724		0			SW	SAND, well graded; Light brown, 85% sand (coarse to fine), 15% silt, trace gravel, loose, moist, micaceous, no odor.	
10	SB-18-10				0731		0			SP	SAND, poorly graded; Light brown, 90% sand (medium to fine), 10% silt, moist, micaceous, no odor.	
	SB-18-12				0736		0			SP-SM	SAND, poorly graded; Light brown, 90% sand (medium to fine), 10% silt, moist, micaceous, no odor.	
											SILTY SAND, poorly graded; Medium brown, 60% sand (medium to fine), 40% silt, dense, moist, micaceous, no odor.	
15												
20												
25												
30												



## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-19	
Borehole Location: Western service bay		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: portable GH-40 Geoprobe		Date Started: 1/28/2002		Total Depth (feet): 12.0	
Drilling Method: Direct Push		Number of Samples: 4		Date Finished: 1/28/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): Drilling: Static: NA	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL):	
				Logged By: L. Browne	
				Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks	
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic			USCS or Rock Type
	SB-19-0.5			50	0849		0			SM	CONCRETE, pad	Start @ 0847
				50	0852							Acetate sleeve
5	SB-19-7			0	1217		0					SB-19-7 not recovered initially
				5	0900							Acetate sleeve
10	SB-19-10			25	1220		0			SW	SAND, well graded; Light brown, 85% sand (coarse to fine), 15% silt, trace gravel, loose, moist, micaceous, no odor.	SB-19-10 not recovered initially
	SB-19-12				0912		0			SP	SAND, poorly graded; Light brown, 85% sand (medium to fine), 15% silt, poor recovery, moist, micaceous, no odor.	
15												Moved 18" West and redrilled hole due to poor recovery.
20												
25												
30												

EA7B BorelSBWestern service bar\LAUSD-EVMS\53306

## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-21	
Borehole Location: Southern service bay		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: Truck mounted and portable GH-40 Geoprobe		Date Started: 1/25/2002		Total Depth (feet): 3.5	
Drilling Method: Direct Push		Number of Samples: 4		Date Finished: 1/25/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): <i>Drilling:</i> <i>Static: NA</i>	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL):	
				Logged By: L. Browne      Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks	
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic			USCS or Rock Type
	SB-21 -0.5	<div></div>		100	1035		0		<div></div>	SM	CONCRETE; pad SILTY SAND; Medium brown, 70% sand (coarse to fine), 30% silt, trace gravel, dense, moist, micaceous, no odor.	Start @ 1032
5									<div></div>		CONCRETE; obstruction	Refusal @ 3.5' w/ GH-40. Switch to truck, also get refusal. Concrete in sample tip.
10												
15												
20												
25												
30												

## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-21A	
Borehole Location: Southern service bay, 36" NW of SB-21				Northing: Easting: Sheet 1 of 1	
Drilling Agency: EST			Driller: Alex Chapman		
Drilling Equipment: Truck mounted Geoprobe			Date Started: 1/28/2002		Total Depth (feet): 12.0
Drilling Method: Direct Push		Number of Samples: 3		Date Finished: 1/28/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): Drilling: Static: NA	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL):	
				Logged By: L. Browne	
				Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic	USCS or Rock Type	
5	SB-21-7	X		100	1336		0			SM	<p>Start @ 1333</p> <p>Moved SB-21 36" N-W from original sample location, did not encounter concrete obstruction.</p>
										SM	
10	SB-21-10	X		100	1338		0			SW	
	SB-21-12				1340		0				
15											
20											
25											
30											





## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-22	
Borehole Location: Southern service bay		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: Truck mounted Geoprobe		Date Started: 1/25/2002		Total Depth (feet): 12.0	
Drilling Method: Direct Push		Number of Samples: 1		Date Finished: 1/28/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Bedrock (feet):	
				Drilling:                      Static: NA	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL):	
				Logged By: L. Browne	
				Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic	USCS or Rock Type	
0.5	SB-22-0.5	X		100	1017		0			CONCRETE; pad	Start @ 1015
5										ARTIFICIAL FILL; Dark brown, vey dense, well graded, moist, no odor.	
7	SB-22-7	X		100	1023		0			SP-SM SILTY SAND, poorly graded; Medium brown, 70% sand (medium to fine), 30% silt, dense, moist, micaceous, no odor.	
10	SB-22-10	X			1028		0			SP-SM SILTY SAND, poorly graded; Medium brown, 65% sand (coarse to fine), 35% silt, moist, micaceous, no odor.	Sample SB-22-12 collected on 1/28
12	SB-22-12	X		100	1315		0				
15											
20											
25											
30											




## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-23	
Borehole Location: Southern service bay		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: portable GH-40 Geoprobe		Date Started: 1/25/2002		Total Depth (feet): 12.0	
Drilling Method: Direct Push		Number of Samples: 4		Date Finished: 1/25/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): <i>Drilling:</i> <i>Static: NA</i>	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL):	
				Logged By: L. Browne      Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks		
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic			USCS or Rock Type	
0.5	SB-23-0.5	X		100	1232		0				CONCRETE; pad ARTIFICIAL FILL; Dark brown, vey dense, well graded, moist, no odor.	Start @ 1228	
5	SB-23-7	X		100	1237		0			SP			SAND, poorly graded; Medium brown, 75% sand (medium to fine), 25% silt, loose, moist, micaceous, no odor.
10	SB-23-10	X		10	1244		0						
	SB-23-12				1255		0						
15													
20													
25													
30													

## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-24	
Borehole Location: Southern service bay		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: portable GH-40 Geoprobe		Date Started: 1/24/2002		Total Depth (feet): 12.0	
Drilling Method: Direct Push		Number of Samples: 4		Date Finished: 1/24/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): <i>Drilling:</i> <i>Static: NA</i>	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL):	
				Logged By: L. Browne      Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic	USCS or Rock Type	
0	SB-24-0.5	X		100	1330		0			CONCRETE, pad	Start @ 1324
5	SB-24-7	X		100	1335		0			SAND, poorly graded; Light brown, 85% sand (medium to fine), 15% silt, trace gravel, loose, moist, micaceous, no odor.	
10	SB-24-10	X		100	1340		0			SILT SAND, poorly graded; Medium brown, 65% sand (medium to fine), 35% silt, dense, moist, micaceous, no odor.	
12	SB-24-12				1342		0				
15											
20											
25											
30											

## Borehole Log




Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-25	
Borehole Location: Southern service bay		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: Truck mounted and portable GH-40 Geoprobos		Date Started: 1/24/2002		Total Depth (feet): 12.0	
Drilling Method: Direct Push		Number of Samples: 4		Date Finished: 1/24/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): Drilling: Static: NA	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL):	
				Logged By: L. Browne	
				Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic	USCS or Rock Type	
SB-25-0.5				100	1240		0			CONCRETE; pad	Start @ 1236  Refusal @ 3' with GH-40 (asphalt), switched to truck mounted rig @ 1245
SB-25-7				100	1304		0			SAND, poorly graded; Light brown, 85% sand (medium to fine), 15% silt, loose, moist, micaceous, no odor.	
SB-25-10				100	1306		0			SAND, well graded; Light brown, 70% sand (coarse to fine), 25% silt, 5% gravel, dense, moist, micaceous, no odor.	
SB-25-12					1309		0			SAND, well graded; Light brown, 70% sand (coarse to fine), 25% silt, 5% gravel, dense, moist, micaceous, no odor.	
										SILT SAND, poorly graded; Medium brown, 65% sand (coarse to fine), 35% silt, loose, moist, micaceous, no odor.	



## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-26	
Borehole Location: Southern service bay		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: portable GH-40 Geoprobe		Date Started: 1/24/2002		Total Depth (feet): 12.0	
Drilling Method: Direct Push		Number of Samples: 4		Date Finished: 1/24/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): <i>Drilling:</i> <i>Static: NA</i>	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL):	
				Logged By: L. Browne	
				Checked By: Steve Williams, R.G.	

Depth (feet)	Samples					Field Analyses			Log		Lithologic Description	Remarks
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic	USCS or Rock Type		
0	SB-26-0.5	X		100	1205		0				CONCRETE; pad ARTIFICIAL FILL; Dark brown, vey dense, well graded, moist, no odor.	Start @ 1202
5	SB-26-7	X		100	1209		0			SP	SAND, poorly graded; Light brown, 80% sand (medium to fine), 20% silt, loose, moist, micaceous, no odor.	
10	SB-26-10 SB-26-12	X		75	1214 1221		0 0			SP	SAND, poorly graded; Light brown, 70% sand (medium to fine), 30% silt, loose, moist, micaceous, no odor.	
15												
20												
25												

## Borehole Log

Project Name: LAUSD-EVMS				Project Number: 53306		Borehole Number: SB-27	
Borehole Location: Clarifier inside northern building				Northing:		Easting:	
Drilling Agency: EST				Driller: Alex Chapman			
Drilling Equipment: portable GH-40 Geoprobe				Date Started: 1/25/2002		Total Depth (feet): 10.0	
Drilling Method: Direct Push				Number of Samples: 3		Date Finished: 1/25/2002	
Drilling Fluid: None				Borehole Diameter (in): 2		Depth to Water (feet): <i>Drilling:</i> <i>Static: NA</i>	
Completion Information: Backfilled with bentonite and capped with concrete						Elevation (feet MSL):	
						Logged By: L. Browne      Checked By: Steve Williams, R.G.	

Depth (feet)	Samples			Field Analyses			Log		Lithologic Description	Remarks		
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests			Graphic	USCS or Rock Type
5	SB-27-0.5			100	1426		0			SP-SM	<b>CONCRETE; pad</b> <b>SILTY SAND</b> , poorly graded; Medium brown, 65% sand (medium to fine), 35% silt, moist, micaceous, no odor. <b>SILTY SAND</b> , poorly graded; Medium brown, 70% sand (medium to fine), 30% silt, trace gravel, moist, micaceous, no odor. <b>SAND</b> , poorly graded; Light brown, 80% sand (coarse to fine), 20% silt, trace gravel, moist, micaceous, no odor.	Start @ 1424
	SB-27-5			100	1429		0			SP-SM		
	SB-27-10			50						SP		
10				100	1438		0					
15												
20												
25												
30												

EAPB Base/SB/Drainage sump in battery service area LAUSD-EVMS63306

## Borehole Log

Project Name: LAUSD-EVMS				Project Number: 53306		Borehole Number: SB-29	
Borehole Location: Basement adjacent to compressor drainage <del>Manhole</del>						Easting: _____	
Drilling Agency: Earth Tech				Driller: Lawrence Browne			
Drilling Equipment: Hand Auger				Date Started: 2/1/2002		Total Depth (feet): 7.0	
Drilling Method: Hand Auger			Number of Samples: 3		Date Finished: 2/1/2002		Depth to Bedrock (feet):
Drilling Fluid: None			Borehole Diameter (in): 2		Depth to Water (feet): <i>Drilling:</i> _____ <i>Static:</i> NA		
Completion Information: Backfilled with bentonite and capped with concrete						Elevation (feet MSL):	
						Logged By: L. Browne	
Checked By: Steve Williams, R.G.							

Depth (feet)	Samples			Field Analyses			Log		Lithologic Description	Remarks		
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests			Graphic	USCS or Rock Type
SB-29-2	X		100	0930		0					<p>CONCRETE; 5" slab over 1/4" coated paper over 3" slab.</p> <p>SAND, well graded; Medium brown, 85% sand (coarse to fine), 15% silt, trace gravel, loose, moist, micaceous, no odor.</p>	<p>Start @ 0900</p> <p>Sample SB-29-Physical taken</p>
SB-29-7	X		100	1015		0						
5												
10												
15												
20												
25												
30												



## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-30	
Borehole Location: Former Sear's garden center		Northing:		Easting:	
Sheet / of /					
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: Truck mounted Geoprobe		Date Started: 1/25/2002		Total Depth (feet): 5.0	
Drilling Method: Direct Push		Number of Samples: 5		Date Finished: 1/25/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Bedrock (feet):	
		Depth to Water (feet):		Drilling: Static: NA	
Completion Information: Backfilled with bentonite and capped with concrete		Elevation (feet MSL) :			
		Logged By: L. Browne		Checked By: Steve Williams, R.G.	

[illegible]

## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-31	
Borehole Location: Western service bay		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: portable GH-40 Geoprobe		Date Started: 1/23/2002		Total Depth (feet): 12.0	
Drilling Method: Direct Push		Number of Samples: 4		Date Finished: 1/23/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): <i>Drilling:</i> <i>Static: NA</i>	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL):	
				Logged By: L. Browne      Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks	
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic			USCS or Rock Type
0	SB-31-0.5	X		100	1018		0			SP-SM	CONCRETE; pad	Start @ 1015
0.5											SILTY SAND, poorly sorted; Medium brown, 70% sand (medium to fine), 30% silt, moist, micaceous, no odor.	
5	SB-31-7	X		100	1021		0			SM	SILTY SAND; Medium brown, 75% sand (medium to fine), 20% silt, 5% gravel, moist, micaceous, no odor.	
10	SB-31-10	X		100	1027		0			SP	SAND, poorly graded; Light brown,	
10	SB-31-12	X			1031		0			SW	SAND, well graded; Light brown,	
15												
20												
25												
30												

## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-32	
Borehole Location: Clarifier near entrance to sales area		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: Truck mounted Geoprobe		Date Started: 1/25/2002		Total Depth (feet): 15.0	
Drilling Method: Direct Push		Number of Samples: 6		Date Finished: 1/25/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): Drilling: Static: NA	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL):	
				Logged By: L. Browne	
				Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic		

## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-33	
Borehole Location: East of former UST area		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: Truck mounted Geoprobe		Date Started: 1/25/2002		Total Depth (feet): 15.0	
Drilling Method: Direct Push		Number of Samples: 3		Date Finished: 1/25/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Bedrock (feet):	
Completion Information: Backfilled with bentonite and capped with concrete		Elevation (feet MSL):		Drilling: Static: NA	
		Logged By: L. Browne		Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks	
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic			USCS or Rock Type
										SM	ASPHALT; driveway SILTY SAND; Medium brown, 70% sand (medium to fine), 30% silt, trace gravel, dense, moist, micaceous, no odor.	Start @ 0653
5	SB-33-5	X	100	0704		0						
10	SB-33-10	X	100	0709		0				SP	SAND, poorly graded; Light brown, 85% sand (medium to fine), 15% silt, loose, moist, micaceous, no odor.	
15	SB-33-15	X	100	0723		0						
20												
25												
30												



## Borehole Log

Project Name: LAUSD-EVMS		Project Number: 53306		Borehole Number: SB-34	
Borehole Location: Immediately North of elevator shaft		Northing:		Easting:	
Drilling Agency: EST		Driller: Alex Chapman			
Drilling Equipment: Truck mounted Geoprobe		Date Started: 1/28/2002		Total Depth (feet): 35.0	
Drilling Method: Direct Push		Number of Samples: 3		Date Finished: 1/28/2002	
Drilling Fluid: None		Borehole Diameter (in): 2		Depth to Water (feet): <i>Drilling:</i> <i>Static: NA</i>	
Completion Information: Backfilled with bentonite and capped with concrete				Elevation (feet MSL):	
				Logged By: L. Browne      Checked By: Steve Williams, R.G.	

Depth (feet)	Samples				Field Analyses			Log		Lithologic Description	Remarks
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Graphic		

## Borehole Log (Continuation Sheet)

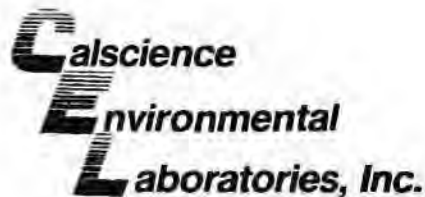
Project Name: LAUSD-EVMS					Project Number: 53306			Borehole Number: SB-34			
Borehole Location: Immediately North of elevator shaft								Sheet 2 of 2			
Depth (feet)	Samples			Field Analysis			Log		Lithologic Description	Remarks	
	Number	Type	Blow Count	Percent Recovery	Time	FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests			Graphic
35	SB-34 -30	X			1105		0		[Shaded Box]		SILTY SAND; Medium brown, 60% sand (coarse to fine), 40% silt, trace gravel, moist, micaceous, no odor.
	SB-34 -35	X		100	1128		0		[Shaded Box]		

**APPENDIX C**

**TCE AND PCE CONTAMINATION MAPS FOR SHALLOW GROUNDWATER IN THE SAN  
FERNANDO VALLEY BASIN**

**APPENDIX D**  
**ANALYTICAL RESULTS**





February 8, 2002  
PM07702

Steve Williams  
Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Subject: Calscience Work Order No.: 02-01-0947  
Client Reference: LAUSD-East Valley M.S./47127

Dear Mr. Williams:

Calscience Environmental Laboratories, Inc. (Calscience) is pleased to submit herewith the subject analytical report. The narrative presented below summarizes our analytical effort and clarifies any quality control anomalies which appear in the report.

#### **Sample Condition on Receipt**

Twenty soil samples and Eight air samples were received as part of this Work Order on January 23, 2002. All samples were transferred to the laboratory in appropriate containers following strict chain-of-custody procedures. The temperature of the ice-chest for the soil samples was measured upon arrival in the laboratory and was not within acceptable limit (10°C). The samples were logged into the Laboratory Information Management System (LIMS), given laboratory identification numbers, and stored in refrigeration units pending analysis.

#### **Data Summary**

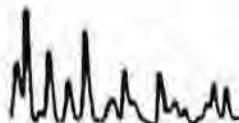
Data is presented on a wet weight basis.

#### Holding Times

All holding time requirements were met.

#### Calibration

Frequency and control criteria for initial and continuing calibration verifications were met.



### Blanks

The method blank data showed non-detectable levels for all constituents, with the exception of trace levels of cobalt and copper for batch 020123lcs9 and selenium for batch 010605lcs5. For VOCs the method blanks showed trace levels of methylene chloride and naphthalene for the following batches 060501AS, 060501AE and 060501BE.

### Matrix Spikes

Matrix spikes (MS) and matrix spike duplicates (MSD) were performed at required frequencies. All recoveries were within acceptable limits.

### Laboratory Control Samples


The Laboratory Control Sample (LCS) analysis was performed at the required frequency. All recoveries were within acceptable limits.

### Surrogates

Surrogate recoveries for all samples were within acceptable control limits.

If there are any questions regarding this report, please contact the undersigned at (714) 895-5494.

Sincerely,

  
Calscience Environmental  
Laboratories, Inc.  
Marycarol Valenzuela  
Project Manager

  
Michael J. Crisostomo  
Quality Assurance Manager

0947

1072

Project Number 47127		Project Name/Client LAUSD - EAST VALLEY M.S.		Custody Seal #										Earth Tech Cooler #									
Sample Custodian: (Signature) <i>LAURENCE BROWNE</i>		Analysis Required										Matrix											
Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	PID Reading (ppm)	Label Number	0270	6010									Sample Type	Sample Container				
1	SB-31-0.5	1/23/02	1013	X		0		X	X									X	X				
2	SB-31-7		1021																				
3	SB-31-10		1027																				
4	SB-31-12		1031																				
5	SB-20-0.5		1050																				
6	SB-20-7		1055																				
7	SB-20-10		1101																				
8	SB-20-12		1107																				
9	SB-13-0.5		1135																				
10	SB-13-7		1140																				
11	SB-13-10		1142																				
12	SB-13-12		1145																				
13	SB-11-0.5		1236																				
14	SB-11-7		1239																				
15	SB-11-10		1242																				
16	SB-11-12		1250																				
17	SB-10-0.5		1346																				
18	SB-10-7		1349																				

Relinquished by: (Signature) <i>[Signature]</i>	Date / Time 1/23/02 1725	Received by: (Signature) <i>[Signature]</i>	Disposed of by: (Signature)	Items:	Date / Time
Relinquished by: (Signature)	Date / Time 1/23/02 1725	Received by: (Signature) <i>[Signature]</i>	Disposed of by: (Signature)	Items:	Date / Time

Send Lab Results To: STEVE WILLIAMS 100 W. BROADWAY STE 240 LONG BEACH CA 90802 fax (562) 951-2086	Remarks: 24 HLTAT (5606 45HR) Federal Express Airbill No.: Lab:	Check Delivery Method: <input type="checkbox"/> Samples delivered in person <input type="checkbox"/> Common carrier	Laboratory Receiving Notes: Custody Seal Intact? Temp. of Shipping Container: Sample Condition:
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White Copy - Lab

Yellow Copy - File

Pink Copy - Client

2 of 2

0947

Project Number 47127		Project Name/Client LAUSD - EAST VALLEY M.S.				Custody Seal #		Earth Tech Cooler #											
Sample Custodian: (Signature) LAWRENCE BROWNE						Analysis Required		Matrix											
Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	PID Reading (ppm)	Label Number	8270	6010	TO-H	METHANE							Sample Type	Sample Container
																		SOIL	GAS
1	SB-10-10	1/23/02	1356	X		0		+	+									X	
2	SB-10-12		1400	X		0		+	+									X	
3	SG-10-20		0930	X						X	X								X
4	SG-10-10		0945	X							X								
5	SG-4-20		1432	X							X								
6	SG-4-10		1434	X							X								
7	SG-11-9D		1506	X															
8	SG-15-20D		1514	X															
9	SG-15-10D		1524	X															
10	SG-14-20D		1538	X						X								X	
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
Relinquished by: (Signature) <i>Lawrence Browne</i>		Date / Time 1/23/02 1125		Received by: (Signature) <i>[Signature]</i>		Disposed of by: (Signature)		Items:		Date / Time									
Relinquished by: (Signature)		Date / Time 1/23/02 1725		Received by: (Signature) <i>[Signature]</i>		Disposed of by: (Signature)		Items:		Date / Time									
Send Lab Results To: STEVE WILLIAMS 100 W. BROADWAY STG. 240 LONG BEACH CA 90802 fax (562) 951-2006				Remarks: 24 HR TAP (5 VOCs 42 HR) Federal Express Airbill No.: Lab:				Check Delivery Method: <input type="checkbox"/> Samples delivered in person <input type="checkbox"/> Common carrier				Laboratory Receiving Notes: Custody Seal Intact? Temp. of Shipping Container: Sample Condition:							

White Copy - Lab

Yellow Copy - File

Pink Copy - Client



0947

1012

Project Number		Project Name/Client		Custody Seal #		Earth Tech Cooler #	
Sample Custodian: (Signature)		Analysis Required		Matrix			
Burn No.	Sample Description (Field ID Number)	Date	Time	Grid	Comp	PID Reading (ppm)	Label Number
1	SB-31-05 ✓	1/27/02	1015	X		0	
2	SB-31-7 ✓		1021				
3	SB-31-10		1027				
4	SB-31-12		1031				
5	SB-20-0.5 ✓		1050				
6	SB-20-7 ✓		1055				
7	SB-20-10		1101				
8	SB-20-12		1107				
9	SB-13-0.5 ✓		1115				
10	SB-13-7 ✓		1140				
11	SB-13-10		1142				
12	SB-13-12		1145				
13	SB-11-0.5		1230				
14	SB-11-7		1239				
15	SB-11-10		1246				
16	SB-11-12		1250				
17	SB-10-0.5		1346				
18	SB-10-7		1349				

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date / Time
<i>[Signature]</i>	1/27/02 1725	<i>[Signature]</i>			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date / Time
	1/27/02 1725	<i>[Signature]</i>			

Send Lab Results To: STEVE WILLIAMS 100 W. BROADWAY STE 240 LONG BEACH CA 90802 Tel: (562) 951-2086	Remarks: 24 HLTAT (SUBC 454R) Federal Express Airbill No.: Lab:	Check Delivery Method: <input type="checkbox"/> Samples delivered in person <input type="checkbox"/> Common carrier	Laboratory Receiving Notes: Custody Seal Intact? Temp. of Shipping Container: Sample Condition:
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2002

JHN-CA-0006 10:07

UNSCIENCE

714 B94 7501

P.08/08

ARTH TECH

A RYDER INTERNATIONAL LTD. COMPANY

00947

Project Number		Project Name/Client		Custody Seal #		Rank Tech Confer #	
Sample Custodian: (Signature)		Sample Description (Field ID Number)		Date		Time	
Sample Type		Sample Container		Analysis Required		Matrix	
Soil		Glass		To-H		METHANE	
1	SB-10-10	1/21/07	1350	X	0		
2	SB-10-12		1400	X	0		
3	SG-10-20		0740	X		X	X
4	SG-10-10		0745	X		X	
5	SG-9-20		1430	X		X	
6	SG-4-10		1434	X		X	
7	SG-11-9 D		1500	X			
8	SG-15-20 D		1504	X			
9	SG-15-10 D		1504	X			
10	SG-14-20 D		1510	X		X	
11							
12							
13							
14							
15							
16							
17							
18							

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date / Time
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date / Time

Send Lab Results To: STEVE WILLIAMS 100 W. BROADWAY STE. 240 LONG BEACH CA 90802 Fax (562) 951-2006	Remarks: 24 HR TAR (FUEL) 43 HR Federal Express Airbill No.: Lab:	Check Delivery Method: <input type="checkbox"/> Samples delivered in person <input type="checkbox"/> Common carrier	Laboratory Receiving Notes: Custody Seal intact? Temp. of Shipping Container: Sample Condition:
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White Copy - Lab

Yellow Copy - File

Pink Copy - Client

**CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.**  
**Sample Summary Report**

**WORK ORDER #:** 02-01-0947

**QAPP:** 0117

#	Client Sample ID	Matrix	Date Collected	NoC	Comment
1	SB-31-0.5	S	01/23/2002	1	
2	SB-31-7	S	01/23/2002	1	
3	SB-31-10	S	01/23/2002	1	
4	SB-31-12	S	01/23/2002	1	
5	SB-20-0.5	S	01/23/2002	1	
6	SB-20-7	S	01/23/2002	1	
7	SB-20-10	S	01/23/2002	1	
8	SB-20-12	S	01/23/2002	1	
9	SB-13-0.5	S	01/23/2002	1	
10	SB-13-7	S	01/23/2002	1	
11	SB-13-10	S	01/23/2002	1	
12	SB-13-12	S	01/23/2002	1	
13	SB-11-0.5	S	01/23/2002	1	
14	SB-11-7	S	01/23/2002	1	
15	SB-11-10	S	01/23/2002	1	
16	SB-11-12	S	01/23/2002	1	
17	SB-10-0.5	S	01/23/2002	1	
18	SB-10-7	S	01/23/2002	1	
19	SB-10-10	S	01/23/2002	1	
20	SB-10-12	S	01/23/2002	1	
21	SG-10-20	A	01/23/2002	1	
22	SG-10-10	A	01/23/2002	1	
23	SG-4-20	A	01/23/2002	1	
24	SG-4-10	A	01/23/2002	1	
25	SG-11-9D	A	01/23/2002	1	
26	SG-15-20D	A	01/23/2002	1	
27	SG-15-10D	A	01/23/2002	1	
28	SG-14-20D	A	01/23/2002	1	



WORK ORDER #: 02-01-0947

Cooler 1 of 1

## SAMPLE RECEIPT FORM

CLIENT: EARTH TECH

DATE: 1/23/02

### TEMPERATURE - SAMPLES RECEIVED BY:

#### CALSCIENCE COURIER:


- ☐ Chilled, cooler with temperature blank provided.  
☐ Chilled, cooler without temperature blank.  
☐ Chilled and placed in cooler with wet ice.  
☒ Ambient and placed in cooler with wet ice.  
☒ Ambient temperature.  
☐ °C Temperature blank.

#### LABORATORY (Other than Calscience Courier):

- ☒ 10 °C Temperature blank.  
☐ Chilled, without temperature blank.  
☒ Ambient temperature. (SUMA)

Initial: 

### CUSTODY SEAL INTACT:

Sample(s): \_\_\_\_\_ Cooler: \_\_\_\_\_ No (Not Intact) : \_\_\_\_\_ Not Applicable (N/A):   
Initial: \_\_\_\_\_

### SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with custody papers.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct containers for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper preservation noted on sample label(s).....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VOA vial(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Initial: 

### COMMENTS:

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**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-31-0.5	02-01-0947-1	01/23/02	Solid	01/23/02	01/24/02	020123lcs9

Comment(s): Mercury was analyzed on 1/24/02 10:28:19 AM with batch 020123lcs5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.229	0.750	1	J	mg/kg	Mercury	0.0181	0.0835	1	J	mg/kg
Arsenic	0.142	0.750	1	J	mg/kg	Molybdenum	0.0518	0.250	1	J	mg/kg
Barium	76.7	0.5	1		mg/kg	Nickel	6.54	0.25	1		mg/kg
Beryllium	0.207	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.283	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	8.62	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	6.60	0.25	1		mg/kg	Vanadium	20.6	0.2	1		mg/kg
Copper	9.18	0.50	1		mg/kg	Zinc	35.4	1.0	1		mg/kg
Lead	5.67	0.50	1		mg/kg						

SB-31-7 02-01-0947-2 01/23/02 Solid 01/23/02 01/24/02 020123lcs9

Comment(s): Mercury was analyzed on 1/24/02 10:31:18 AM with batch 020123lcs5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0669	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	45.0	0.5	1		mg/kg	Nickel	2.66	0.25	1		mg/kg
Beryllium	0.102	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.120	0.500	1	J	mg/kg	Silver	0.111	0.250	1	J	mg/kg
Chromium (Total)	3.17	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	3.40	0.25	1		mg/kg	Vanadium	9.86	0.25	1		mg/kg
Copper	3.88	0.50	1		mg/kg	Zinc	16.3	1.0	1		mg/kg
Lead	1.17	0.50	1		mg/kg						

SB-31-10 02-01-0947-3 01/23/02 Solid 01/23/02 01/24/02 020123lcs9

Comment(s): Mercury was analyzed on 1/24/02 10:34:20 AM with batch 020123lcs5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.297	0.750	1	J	mg/kg	Mercury	0.0149	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.0233	0.250	1	J	mg/kg
Barium	60.1	0.5	1		mg/kg	Nickel	4.75	0.25	1		mg/kg
Beryllium	0.126	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.168	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	6.89	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	5.04	0.25	1		mg/kg	Vanadium	15.4	0.2	1		mg/kg
Copper	5.54	0.50	1		mg/kg	Zinc	23.0	1.0	1		mg/kg
Lead	1.35	0.50	1		mg/kg						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-31-12	02-01-0947-4	01/23/02	Solid	01/23/02	01/24/02	020123ics9

Comment(s): Mercury was analyzed on 1/24/02 10:37:20 AM with batch 020123ics5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.336	0.750	1	J	mg/kg	Mercury	0.0166	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.0436	0.250	1	J	mg/kg
Barium	91.4	0.5	1		mg/kg	Nickel	9.91	0.25	1		mg/kg
Beryllium	0.279	0.250	1		mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.349	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	13.5	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	8.73	0.25	1		mg/kg	Vanadium	27.2	0.2	1		mg/kg
Copper	12.2	0.5	1		mg/kg	Zinc	38.5	1.0	1		mg/kg
Lead	2.55	0.50	1		mg/kg						

SB-20-5 02-01-0947-5 01/23/02 Solid 01/23/02 01/24/02 020123ics9

Comment(s): Mercury was analyzed on 1/24/02 10:40:21 AM with batch 020123ics5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.720	0.750	1	J	mg/kg	Mercury	ND	0.0835	1		mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	315	0.500	1		mg/kg	Nickel	8.07	0.25	1		mg/kg
Beryllium	0.142	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.518	0.500	1		mg/kg	Silver	0.0305	0.250	1	J	mg/kg
Chromium (Total)	10.1	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	14.0	0.2	1		mg/kg	Vanadium	47.2	0.2	1		mg/kg
Copper	11.0	0.5	1		mg/kg	Zinc	52.6	1.0	1		mg/kg
Lead	1.22	0.50	1		mg/kg						

SB-20-7 02-01-0947-6 01/23/02 Solid 01/23/02 01/24/02 020123ics9

Comment(s): Mercury was analyzed on 1/24/02 10:43:23 AM with batch 020123ics5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	ND	0.0835	1		mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	31.7	0.5	1		mg/kg	Nickel	1.81	0.25	1		mg/kg
Beryllium	0.0681	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.0579	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	2.13	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	2.12	0.25	1		mg/kg	Vanadium	6.60	0.25	1		mg/kg
Copper	2.72	0.50	1		mg/kg	Zinc	10.8	1.0	1		mg/kg
Lead	0.926	0.500	1		mg/kg						

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-20-10	02-01-0947-7	01/23/02	Solid	01/23/02	01/24/02	020123lcs9

Comment(s): Mercury was analyzed on 1/24/02 10:46:25 AM with batch 020123lcs5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0155	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	54.4	0.5	1		mg/kg	Nickel	3.57	0.25	1		mg/kg
Beryllium	0.102	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.119	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	4.37	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	3.68	0.25	1		mg/kg	Vanadium	11.5	0.2	1		mg/kg
Copper	4.21	0.50	1		mg/kg	Zinc	16.2	1.0	1		mg/kg
Lead	1.12	0.50	1		mg/kg						

9-20-12	02-01-0947-8	01/23/02	Solid	01/23/02	01/24/02	020123lcs9
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Comment(s): Mercury was analyzed on 1/24/02 10:49:28 AM with batch 020123lcs5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	ND	0.0835	1		mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.0409	0.250	1	J	mg/kg
Barium	42.8	0.5	1		mg/kg	Nickel	3.74	0.25	1		mg/kg
Beryllium	0.0938	0.250	1	J	mg/kg	Selenium	0.249	0.750	1	J	mg/kg
Cadmium	0.112	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	5.22	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	3.47	0.25	1		mg/kg	Vanadium	10.9	0.2	1		mg/kg
Copper	4.40	0.50	1		mg/kg	Zinc	16.4	1.0	1		mg/kg
Lead	0.967	0.500	1		mg/kg						

SB-13-0.5	02-01-0947-9	01/23/02	Solid	01/23/02	01/24/02	020123lcs9
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Comment(s): Mercury was analyzed on 1/24/02 10:52:31 AM with batch 020123lcs5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	1.30	0.75	1		mg/kg	Mercury	ND	0.0835	1		mg/kg
Arsenic	0.430	0.750	1	J	mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	286	0.500	1		mg/kg	Nickel	8.43	0.25	1		mg/kg
Beryllium	0.173	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.664	0.500	1		mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	10.7	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	12.9	0.2	1		mg/kg	Vanadium	46.2	0.2	1		mg/kg
Copper	13.4	0.5	1		mg/kg	Zinc	63.4	1.0	1		mg/kg
Lead	18.3	0.5	1		mg/kg						



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-13-7	02-01-0947-10	01/23/02	Solid	01/23/02	01/24/02	020123ics5

Comment(s): Mercury was analyzed on 1/24/02 10:55:34 AM with batch 020123ics5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.319	0.750	1	J	mg/kg	Mercury	0.0183	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.0547	0.250	1	J	mg/kg
Barium	61.7	0.5	1		mg/kg	Nickel	5.07	0.25	1		mg/kg
Beryllium	0.141	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.176	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	6.83	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	5.45	0.25	1		mg/kg	Vanadium	16.7	0.2	1		mg/kg
Copper	5.94	0.50	1		mg/kg	Zinc	24.7	1.0	1		mg/kg
Lead	1.46	0.50	1		mg/kg						

B-13-10	02-01-0947-11	01/23/02	Solid	01/23/02	01/24/02	020123ics5
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Comment(s): Mercury was analyzed on 1/24/02 11:04:46 AM with batch 020123ics5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.381	0.750	1	J	mg/kg	Mercury	0.0142	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.0211	0.250	1	J	mg/kg
Barium	64.0	0.5	1		mg/kg	Nickel	5.19	0.25	1		mg/kg
Beryllium	0.134	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.169	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	6.16	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	5.20	0.25	1		mg/kg	Vanadium	16.0	0.2	1		mg/kg
Copper	5.92	0.50	1		mg/kg	Zinc	23.8	1.0	1		mg/kg
Lead	1.28	0.50	1		mg/kg						

SB-13-12	02-01-0947-12	01/23/02	Solid	01/23/02	01/24/02	020123ics5
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Comment(s): Mercury was analyzed on 1/24/02 11:07:50 AM with batch 020123ics5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.212	0.750	1	J	mg/kg	Mercury	0.0133	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.0278	0.250	1	J	mg/kg
Barium	111	0.500	1		mg/kg	Nickel	10.2	0.2	1		mg/kg
Beryllium	0.284	0.250	1		mg/kg	Selenium	0.787	0.750	1		mg/kg
Cadmium	0.404	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	14.1	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	9.23	0.25	1		mg/kg	Vanadium	29.5	0.2	1		mg/kg
Copper	12.9	0.5	1		mg/kg	Zinc	40.1	1.0	1		mg/kg
Lead	2.73	0.50	1		mg/kg						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-11-05	02-01-0947-13	01/23/02	Solid	01/23/02	01/24/02	020123lcs9

Comment(s): Mercury was analyzed on 1/24/02 11:10:56 AM with batch 020123lcs5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	1.56	0.75	1		mg/kg	Mercury	ND	0.0835	1		mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	304	0.500	1		mg/kg	Nickel	7.70	0.25	1		mg/kg
Beryllium	0.161	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.522	0.500	1		mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	10.4	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	13.1	0.2	1		mg/kg	Vanadium	49.8	0.2	1		mg/kg
Copper	11.8	0.5	1		mg/kg	Zinc	53.0	1.0	1		mg/kg
Lead	1.01	0.50	1		mg/kg						

B-11-7	02-01-0947-14	01/23/02	Solid	01/23/02	01/24/02	020123lcs9
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Comment(s): Mercury was analyzed on 1/24/02 11:14:02 AM with batch 020123lcs5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.215	0.750	1	J	mg/kg	Mercury	0.0187	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.201	0.250	1	J	mg/kg
Barium	47.1	0.5	1		mg/kg	Nickel	3.34	0.25	1		mg/kg
Beryllium	0.0835	0.250	1	J	mg/kg	Selenium	0.405	0.750	1	J	mg/kg
Cadmium	0.125	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	4.56	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	3.17	0.25	1		mg/kg	Vanadium	10.2	0.2	1		mg/kg
Copper	4.14	0.50	1		mg/kg	Zinc	17.7	1.0	1		mg/kg
Lead	1.03	0.50	1		mg/kg						

SB-11-10	02-01-0947-15	01/23/02	Solid	01/23/02	01/24/02	020123lcs9
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Comment(s): Mercury was analyzed on 1/24/02 11:17:07 AM with batch 020123lcs5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	ND	0.0835	1		mg/kg
Arsenic	0.133	0.750	1	J	mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	63.2	0.5	1		mg/kg	Nickel	4.79	0.25	1		mg/kg
Beryllium	0.132	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.196	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	6.87	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	5.22	0.25	1		mg/kg	Vanadium	17.6	0.2	1		mg/kg
Copper	5.76	0.50	1		mg/kg	Zinc	23.8	1.0	1		mg/kg
Lead	1.30	0.50	1		mg/kg						

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-11-12	02-01-0947-16	01/23/02	Solid	01/23/02	01/24/02	020123ics9

Comment(s): Mercury was analyzed on 1/24/02 11:20:09 AM with batch 020123ics5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0307	0.0835	1	J	mg/kg
Arsenic	0.315	0.750	1	J	mg/kg	Molybdenum	0.229	0.250	1	J	mg/kg
Barium	43.0	0.5	1		mg/kg	Nickel	2.98	0.25	1		mg/kg
Beryllium	0.0952	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.103	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	4.72	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	3.37	0.25	1		mg/kg	Vanadium	10.5	0.2	1		mg/kg
Copper	4.09	0.50	1		mg/kg	Zinc	16.2	1.0	1		mg/kg
Lead	1.21	0.50	1		mg/kg						

SB-10-05	02-01-0947-17	01/23/02	Solid	01/23/02	01/24/02	020123ics9
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Comment(s): Mercury was analyzed on 1/24/02 11:32:13 AM with batch 020123ics5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.198	0.750	1	J	mg/kg	Mercury	0.245	0.083	1		mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	69.7	0.5	1		mg/kg	Nickel	5.62	0.25	1		mg/kg
Beryllium	0.162	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.235	0.500	1	J	mg/kg	Silver	NO	0.250	1		mg/kg
Chromium (Total)	7.48	0.25	1		mg/kg	Thallium	NO	0.750	1		mg/kg
Cobalt	5.90	0.25	1		mg/kg	Vanadium	19.2	0.2	1		mg/kg
Copper	8.02	0.50	1		mg/kg	Zinc	31.3	1.0	1		mg/kg
Lead	4.67	0.50	1		mg/kg						

SB-10-7	02-01-0947-18	01/23/02	Solid	01/23/02	01/24/02	020123ics9
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Comment(s): Mercury was analyzed on 1/24/02 11:35:11 AM with batch 020123ics5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.230	0.750	1	J	mg/kg	Mercury	ND	0.0835	1		mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	41.7	0.5	1		mg/kg	Nickel	2.65	0.25	1		mg/kg
Beryllium	0.0728	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.0834	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	3.60	0.25	1		mg/kg	Thallium	NO	0.750	1		mg/kg
Cobalt	3.13	0.25	1		mg/kg	Vanadium	9.24	0.25	1		mg/kg
Copper	3.37	0.50	1		mg/kg	Zinc	14.9	1.0	1		mg/kg
Lead	1.03	0.50	1		mg/kg						

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-10-10	02-01-0947-19	01/23/02	Solid	01/23/02	01/24/02	020123ics9

Comment(s): Mercury was analyzed on 1/24/02 11:38:13 AM with batch 020123ics5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0182	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.183	0.250	1	J	mg/kg
Barium	36.1	0.5	1		mg/kg	Nickel	2.17	0.25	1		mg/kg
Beryllium	0.0619	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.0682	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	2.81	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	2.42	0.25	1		mg/kg	Vanadium	6.74	0.25	1		mg/kg
Copper	3.32	0.50	1		mg/kg	Zinc	11.9	1.0	1		mg/kg
Lead	0.937	0.500	1		mg/kg						

SB-10-12	02-01-0947-20	01/23/02	Solid	01/23/02	01/24/02	020123ics9
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Comment(s): Mercury was analyzed on 1/24/02 11:41:14 AM with batch 020123ics5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0187	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.0377	0.250	1	J	mg/kg
Barium	30.9	0.5	1		mg/kg	Nickel	2.49	0.25	1		mg/kg
Beryllium	0.0632	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.0706	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	3.25	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	2.42	0.25	1		mg/kg	Vanadium	7.52	0.25	1		mg/kg
Copper	3.25	0.50	1		mg/kg	Zinc	12.0	1.0	1		mg/kg
Lead	0.839	0.500	1		mg/kg						

Method Blank	099-04-007-1,289	N/A	Solid	01/23/02	01/24/02	020123ics5
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Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0835	1		mg/kg

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	097-01-002-3,066	N/A	Solid	01/23/02	01/24/02	0201231ce9

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Arsenic	ND	0.750	1		mg/kg	Nickel	ND	0.250	1		mg/kg
Barium	ND	0.500	1		mg/kg	Selenium	ND	0.750	1		mg/kg
Beryllium	ND	0.250	1		mg/kg	Silver	ND	0.250	1		mg/kg
Cadmium	ND	0.500	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Chromium (Total)	ND	0.250	1		mg/kg	Vanadium	ND	0.250	1		mg/kg
Cobalt	0.0188	0.250	1	J	mg/kg	Zinc	ND	1.00	1		mg/kg
Copper	0.0947	0.500	1	J	mg/kg	Lead	ND	0.500	1		mg/kg



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-31-B.5	02-01-0947-1	01/23/02	Solid	01/23/02	01/24/02	0201236

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benazidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	90	31-142		Phenol-d6	95	30-136	
Nitrobenzene-d5	93	28-139		2-Fluorobiphenyl	91	33-144	
2,4,6-Tribromophenol	84	24-152		p-Terphenyl-d14	93	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-31-7	02-01-0947-2	01/23/02	Solid	01/23/02	01/24/02	0201236

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	93	31-142		Phenol-d6	98	30-136	
Nitrobenzene-d5	98	28-139		2-Fluorobiphenyl	94	33-144	
2,4,6-Tribromophenol	89	24-152		p-Terphenyl-d14	93	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-20-0.5	02-01-0947-5	01/23/02	Solid	01/23/02	01/24/02	0201236

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	90	31-142		Phenol-d6	98	30-136	
Nitrobenzene-d5	95	28-139		2-Fluorobiphenyl	93	33-144	
2,4,6-Tribromophenol	86	24-152		p-Terphenyl-d14	93	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-20-7	02-01-0947-6	01/23/02	Solid	01/23/02	01/24/02	0201236

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
2-Fluorophenol	87	31-142				Phenol-d6	90	30-136			
Nitrobenzene-d5	89	28-139				2-Fluorobiphenyl	86	33-144			
2,4,6-Tribromophenol	78	24-152				p-Terphenyl-d14	84	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-13-0.5	02-01-0947-9	01/23/02	Solid	01/23/02	01/24/02	0201236

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	92	31-142		Phenol-d6	96	30-136	
Nitrobenzene-d5	94	28-139		2-Fluorobiphenyl	91	33-144	
2,4,6-Tribromophenol	84	24-152		p-Terphenyl-d14	89	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-13-7	02-01-0947-10	01/23/02	Solid	01/23/02	01/24/02	0201238

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Ben-zidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	93	31-142		Phenol-d6	98	30-136	
Nitrobenzene-d5	93	28-139		2-Fluorobiphenyl	92	33-144	
2,4,6-Tribromophenol	84	24-152		p-Terphenyl-d14	90	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-11-0.5	02-01-0947-13	01/23/02	Solid	01/23/02	01/24/02	0201236

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	90	31-142		Phenol-d6	95	30-136	
Nitrobenzene-d5	93	28-139		2-Fluorobiphenyl	91	33-144	
2,4,6-Tribromophenol	81	24-152		p-Terphenyl-d14	90	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-11-7	02-01-0947-14	01/23/02	Solid	01/23/02	01/24/02	0201236

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	88	31-142		Phenol-d6	92	30-136	
Nitrobenzene-d5	91	28-139		2-Fluorobiphenyl	88	33-144	
2,4,6-Tribromophenol	77	24-152		p-Terphenyl-d14	87	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-10-0.5	02-01-0947-17	01/23/02	Solid	01/23/02	01/24/02	0201236

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benazidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	74	31-142		Phenol-d6	79	30-136	
Nitrobenzene-d5	75	28-139		2-Fluorobiphenyl	77	33-144	
2,4,6-Tribromophenol	65	24-152		p-Terphenyl-d14	79	23-160	

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	OC Batch ID
SB-10-7	02-01-0947-18	01/23/02	Solid	01/23/02	01/24/02	0201235

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	73	31-142		Phenol-d6	77	30-136	
Nitrobenzene-d5	74	28-139		2-Fluorobiphenyl	74	33-144	
2,4,6-Tribromophenol	59	24-152		p-Terphenyl-d14	74	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	093-04-010-1,175	N/A	Solid	01/23/02	01/24/02	0201236

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzolc Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Napthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>			<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>		
2-Fluorophenol	108	31-142				Phenol-d6	114	30-136			
Nitrobenzene-d5	107	28-139				2-Fluorobiphenyl	100	33-144			
2,4,6-Tribromophenol	103	24-152				p-Terphenyl-d14	100	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: N/A  
Method: EPA TO-14A

Project: LAUSD-East Valley M.S. / 47127

Page 1 of 10

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SG-10-20	02-01-0947-21	01/23/02	Air	N/A	01/23/02	K020123A

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Dichlorodifluoromethane	1.3	0.6	1.34		ppb (v/v)	1,1,2-Trichloroethane	ND	0.67	1.34		ppb (v/v)
Chloromethane	ND	0.67	1.34		ppb (v/v)	Toluene	9.2	0.6	1.34		ppb (v/v)
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	2.7	1.34		ppb (v/v)	Trichloroethene	ND	0.67	1.34		ppb (v/v)
Vinyl Chloride	ND	0.67	1.34		ppb (v/v)	1,2-Dibromoethane	ND	0.67	1.34		ppb (v/v)
Bromomethane	ND	0.67	1.34		ppb (v/v)	Tetrachloroethene	740	11	21.4	D	ppb (v/v)
Chloroethane	ND	0.67	1.34		ppb (v/v)	Chlorobenzene	ND	0.67	1.34		ppb (v/v)
Trichlorofluoromethane	0.68	0.67	1.34		ppb (v/v)	Ethylbenzene	5.4	0.6	1.34		ppb (v/v)
1,1-Dichloroethene	ND	0.67	1.34		ppb (v/v)	p/m-Xylene	30	1	1.34		ppb (v/v)
Methylene Chloride	ND	2.7	1.34		ppb (v/v)	Styrene	ND	1.3	1.34		ppb (v/v)
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.3	1.34		ppb (v/v)	1,1,2,2-Tetrachloroethane	ND	0.67	1.34		ppb (v/v)
1,1-Dichloroethane	ND	0.67	1.34		ppb (v/v)	o-Xylene	20	0.67	1.34		ppb (v/v)
c-1,2-Dichloroethene	ND	0.67	1.34		ppb (v/v)	1,3,5-Trimethylbenzene	28	0.67	1.34		ppb (v/v)
Chloroform	ND	0.67	1.34		ppb (v/v)	1,2,4-Trimethylbenzene	370	11	21.4	D	ppb (v/v)
1,2-Dichloroethane	ND	0.67	1.34		ppb (v/v)	Benzyl Chloride	ND	0.67	1.34		ppb (v/v)
1,1,1-Trichloroethane	0.98	0.67	1.34		ppb (v/v)	1,3-Dichlorobenzene	ND	0.67	1.34		ppb (v/v)
Benzene	0.94	0.67	1.34		ppb (v/v)	1,4-Dichlorobenzene	ND	0.67	1.34		ppb (v/v)
Carbon Tetrachloride	ND	0.67	1.34		ppb (v/v)	1,2-Dichlorobenzene	ND	0.67	1.34		ppb (v/v)
1,2-Dichloropropane	ND	0.67	1.34		ppb (v/v)	1,2,4-Trichlorobenzene	ND	0.67	1.34		ppb (v/v)
c-1,3-Dichloropropene	ND	0.67	1.34		ppb (v/v)	Hexachloro-1,3-Butadiene	ND	0.67	1.34		ppb (v/v)
t-1,3-Dichloropropene	ND	0.67	1.34		ppb (v/v)						



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: N/A  
Method: EPA TO-14A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SG-10-10	02-01-0947-22	01/23/02	Air	N/A	01/23/02	K020123A

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Dichlorodifluoromethane	0.92	0.68	1.35		ppb (v/v)	1,1,2-Trichloroethane	ND	0.68	1.35		ppb (v/v)
Chloromethane	ND	0.68	1.35		ppb (v/v)	Toluene	26	0.68	1.35		ppb (v/v)
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	2.7	1.35		ppb (v/v)	Trichloroethene	ND	0.68	1.35		ppb (v/v)
Vinyl Chloride	ND	0.68	1.35		ppb (v/v)	1,2-Dibromoethane	ND	0.68	1.35		ppb (v/v)
Bromomethane	ND	0.68	1.35		ppb (v/v)	Tetrachloroethene	170	2	5.4	D	ppb (v/v)
Chloroethane	ND	0.68	1.35		ppb (v/v)	Chlorobenzene	ND	0.68	1.35		ppb (v/v)
Trichlorofluoromethane	ND	0.68	1.35		ppb (v/v)	Ethylbenzene	9.7	0.6	1.35		ppb (v/v)
1,1-Dichloroethene	ND	0.68	1.35		ppb (v/v)	p/m-Xylene	47	1	1.35		ppb (v/v)
Methylene Chloride	ND	2.7	1.35		ppb (v/v)	Styrene	ND	1.4	1.35		ppb (v/v)
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.4	1.35		ppb (v/v)	1,1,2,2-Tetrachloroethane	ND	0.68	1.35		ppb (v/v)
1,1-Dichloroethane	ND	0.68	1.35		ppb (v/v)	o-Xylene	19	0.68	1.35		ppb (v/v)
c-1,2-Dichloroethene	ND	0.68	1.35		ppb (v/v)	1,3,5-Trimethylbenzene	11	0.68	1.35		ppb (v/v)
Chloroform	ND	0.68	1.35		ppb (v/v)	1,2,4-Trimethylbenzene	21	0.68	1.35		ppb (v/v)
1,2-Dichloroethane	ND	0.68	1.35		ppb (v/v)	Benzyl Chloride	ND	0.68	1.35		ppb (v/v)
1,1,1-Trichloroethane	ND	0.68	1.35		ppb (v/v)	1,3-Dichlorobenzene	ND	0.68	1.35		ppb (v/v)
Benzene	1.9	0.6	1.35		ppb (v/v)	1,4-Dichlorobenzene	ND	0.68	1.35		ppb (v/v)
Carbon Tetrachloride	ND	0.68	1.35		ppb (v/v)	1,2-Dichlorobenzene	ND	0.68	1.35		ppb (v/v)
1,2-Dichloropropane	ND	0.68	1.35		ppb (v/v)	1,2,4-Trichlorobenzene	ND	0.68	1.35		ppb (v/v)
c-1,3-Dichloropropene	ND	0.68	1.35		ppb (v/v)	Hexachloro-1,3-Butadiene	ND	0.68	1.35		ppb (v/v)
t-1,3-Dichloropropene	ND	0.68	1.35		ppb (v/v)						

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: N/A  
Method: EPA TO-14A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SG-4-20	02-01-0947-23	01/23/02	Air	N/A	01/23/02	K020123A

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Dichlorodifluoromethane	15	0.70	1.39		ppb (v/v)	1,1,2-Trichloroethane	ND	0.70	1.39		ppb (v/v)
Chloromethane	ND	0.70	1.39		ppb (v/v)	Toluene	4.6	0.7	1.39		ppb (v/v)
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	2.8	1.39		ppb (v/v)	Trichloroethene	ND	0.70	1.39		ppb (v/v)
Vinyl Chloride	ND	0.70	1.39		ppb (v/v)	1,2-Dibromoethane	ND	0.70	1.39		ppb (v/v)
Bromomethane	ND	0.70	1.39		ppb (v/v)	Tetrachloroethene	9.3	0.7	1.39		ppb (v/v)
Chloroethane	ND	0.70	1.39		ppb (v/v)	Chlorobenzene	ND	0.70	1.39		ppb (v/v)
Trichlorofluoromethane	ND	0.70	1.39		ppb (v/v)	Ethylbenzene	4.1	0.7	1.39		ppb (v/v)
1,1-Dichloroethene	ND	0.70	1.39		ppb (v/v)	p/m-Xylene	21	1	1.39		ppb (v/v)
Methylene Chloride	ND	2.8	1.39		ppb (v/v)	Styrene	ND	1.4	1.39		ppb (v/v)
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.4	1.39		ppb (v/v)	1,1,2,2-Tetrachloroethane	ND	0.70	1.39		ppb (v/v)
1,1-Dichloroethane	ND	0.70	1.39		ppb (v/v)	o-Xylene	9.6	0.7	1.39		ppb (v/v)
c-1,2-Dichloroethene	ND	0.70	1.39		ppb (v/v)	1,3,5-Trimethylbenzene	2.3	0.7	1.39		ppb (v/v)
Chloroform	ND	0.70	1.39		ppb (v/v)	1,2,4-Trimethylbenzene	4.9	0.7	1.39		ppb (v/v)
1,2-Dichloroethane	ND	0.70	1.39		ppb (v/v)	Benzyl Chloride	ND	0.70	1.39		ppb (v/v)
1,1,1-Trichloroethane	1.0	0.7	1.39		ppb (v/v)	1,3-Dichlorobenzene	ND	0.70	1.39		ppb (v/v)
Benzene	ND	0.70	1.39		ppb (v/v)	1,4-Dichlorobenzene	ND	0.70	1.39		ppb (v/v)
Carbon Tetrachloride	ND	0.70	1.39		ppb (v/v)	1,2-Dichlorobenzene	ND	0.70	1.39		ppb (v/v)
1,2-Dichloropropane	ND	0.70	1.39		ppb (v/v)	1,2,4-Trichlorobenzene	ND	0.70	1.39		ppb (v/v)
c-1,3-Dichloropropene	ND	0.70	1.39		ppb (v/v)	Hexachloro-1,3-Butadiene	ND	0.70	1.39		ppb (v/v)
t-1,3-Dichloropropene	ND	0.70	1.39		ppb (v/v)						

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: N/A  
Method: EPA TO-14A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SG-4-10	02-01-0947-24	01/23/02	Air	N/A	01/23/02	K020123A

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Dichlorodifluoromethane	10	0.70	1.39		ppb (v/v)	1,1,2-Trichloroethane	ND	0.70	1.39		ppb (v/v)
Chloromethane	ND	0.70	1.39		ppb (v/v)	Toluene	3.8	0.7	1.39		ppb (v/v)
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	2.8	1.39		ppb (v/v)	Trichloroethene	ND	0.70	1.39		ppb (v/v)
Vinyl Chloride	ND	0.70	1.39		ppb (v/v)	1,2-Dibromoethane	ND	0.70	1.39		ppb (v/v)
Bromomethane	ND	0.70	1.39		ppb (v/v)	Tetrachloroethene	4.3	0.7	1.39		ppb (v/v)
Chloroethane	ND	0.70	1.39		ppb (v/v)	Chlorobenzene	ND	0.70	1.39		ppb (v/v)
Trichlorofluoromethane	ND	0.70	1.39		ppb (v/v)	Ethylbenzene	2.7	0.7	1.39		ppb (v/v)
1,1-Dichloroethene	ND	0.70	1.39		ppb (v/v)	p/m-Xylene	16	1	1.39		ppb (v/v)
Methylene Chloride	ND	2.8	1.39		ppb (v/v)	Styrene	ND	1.4	1.39		ppb (v/v)
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.4	1.39		ppb (v/v)	1,1,2,2-Tetrachloroethane	ND	0.70	1.39		ppb (v/v)
1,1-Dichloroethane	ND	0.70	1.39		ppb (v/v)	o-Xylene	8.7	0.7	1.39		ppb (v/v)
c-1,2-Dichloroethene	ND	0.70	1.39		ppb (v/v)	1,3,5-Trimethylbenzene	3.0	0.7	1.39		ppb (v/v)
Chloroform	ND	0.70	1.39		ppb (v/v)	1,2,4-Trimethylbenzene	5.7	0.7	1.39		ppb (v/v)
1,2-Dichloroethane	ND	0.70	1.39		ppb (v/v)	Benzyl Chloride	ND	0.70	1.39		ppb (v/v)
1,1,1-Trichloroethane	ND	0.70	1.39		ppb (v/v)	1,3-Dichlorobenzene	ND	0.70	1.39		ppb (v/v)
Benzene	ND	0.70	1.39		ppb (v/v)	1,4-Dichlorobenzene	ND	0.70	1.39		ppb (v/v)
Carbon Tetrachloride	ND	0.70	1.39		ppb (v/v)	1,2-Dichlorobenzene	ND	0.70	1.39		ppb (v/v)
1,2-Dichloropropane	ND	0.70	1.39		ppb (v/v)	1,2,4-Trichlorobenzene	ND	0.70	1.39		ppb (v/v)
c-1,3-Dichloropropene	ND	0.70	1.39		ppb (v/v)	Hexachloro-1,3-Butadiene	ND	0.70	1.39		ppb (v/v)
t-1,3-Dichloropropene	ND	0.70	1.39		ppb (v/v)						

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: N/A  
Method: EPA TO-14A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SG-11-9D	02-01-0947-25	01/23/02	Air	N/A	01/23/02	K020123A

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Dichlorodifluoromethane	1.8	0.7	1.39		ppb (v/v)	1,1,2-Trichloroethane	ND	0.70	1.39		ppb (v/v)
Chloromethane	ND	0.70	1.39		ppb (v/v)	Toluene	16	0.70	1.39		ppb (v/v)
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	2.8	1.39		ppb (v/v)	Trichloroethene	3.8	0.7	1.39		ppb (v/v)
Vinyl Chloride	ND	0.70	1.39		ppb (v/v)	1,2-Dibromoethane	ND	0.70	1.39		ppb (v/v)
Bromomethane	ND	0.70	1.39		ppb (v/v)	Tetrachloroethene	840	14	27.8	D	ppb (v/v)
Chloroethane	ND	0.70	1.39		ppb (v/v)	Chlorobenzene	ND	0.70	1.39		ppb (v/v)
Trichlorofluoromethane	0.78	0.70	1.39		ppb (v/v)	Ethylbenzene	4.9	0.7	1.39		ppb (v/v)
1,1-Dichloroethene	ND	0.70	1.39		ppb (v/v)	p/m-Xylene	27	1	1.39		ppb (v/v)
Methylene Chloride	ND	2.8	1.39		ppb (v/v)	Styrene	ND	1.4	1.39		ppb (v/v)
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.4	1.39		ppb (v/v)	1,1,2,2-Tetrachloroethane	ND	0.70	1.39		ppb (v/v)
1,1-Dichloroethane	ND	0.70	1.39		ppb (v/v)	o-Xylene	12	0.70	1.39		ppb (v/v)
c-1,2-Dichloroethene	ND	0.70	1.39		ppb (v/v)	1,3,5-Trimethylbenzene	7.0	0.7	1.39		ppb (v/v)
Chloroform	ND	0.70	1.39		ppb (v/v)	1,2,4-Trimethylbenzene	15	0.70	1.39		ppb (v/v)
1,2-Dichloroethane	ND	0.70	1.39		ppb (v/v)	Benzyl Chloride	ND	0.70	1.39		ppb (v/v)
1,1,1-Trichloroethane	0.95	0.70	1.39		ppb (v/v)	1,3-Dichlorobenzene	ND	0.70	1.39		ppb (v/v)
Benzene	1.5	0.7	1.39		ppb (v/v)	1,4-Dichlorobenzene	ND	0.70	1.39		ppb (v/v)
Carbon Tetrachloride	ND	0.70	1.39		ppb (v/v)	1,2-Dichlorobenzene	ND	0.70	1.39		ppb (v/v)
1,2-Dichloropropane	ND	0.70	1.39		ppb (v/v)	1,2,4-Trichlorobenzene	ND	0.70	1.39		ppb (v/v)
c-1,3-Dichloropropene	ND	0.70	1.39		ppb (v/v)	Hexachloro-1,3-Butadiene	ND	0.70	1.39		ppb (v/v)
t-1,3-Dichloropropene	ND	0.70	1.39		ppb (v/v)						



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: N/A  
Method: EPA TO-14A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SG-15-20D	02-01-0947-28	01/23/02	Air	N/A	01/25/02	K020125A

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Dichlorodifluoromethane	ND	2.8	5.56		ppb (v/v)	1,1,2-Trichloroethane	ND	2.8	5.56		ppb (v/v)
Chloromethane	ND	2.8	5.56		ppb (v/v)	Toluene	12	2	5.56		ppb (v/v)
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	11	5.56		ppb (v/v)	Trichloroethene	ND	2.8	5.56		ppb (v/v)
Vinyl Chloride	ND	2.8	5.56		ppb (v/v)	1,2-Dibromoethane	ND	2.8	5.56		ppb (v/v)
Bromomethane	ND	2.8	5.56		ppb (v/v)	Tetrachloroethene	460	14	27.8	D	ppb (v/v)
Chloroethane	ND	2.8	5.56		ppb (v/v)	Chlorobenzene	ND	2.8	5.56		ppb (v/v)
Trichlorofluoromethane	ND	2.8	5.56		ppb (v/v)	Ethylbenzene	44	2	5.56		ppb (v/v)
1,1-Dichloroethene	ND	2.8	5.56		ppb (v/v)	p/m-Xylene	160	5	5.56		ppb (v/v)
Methylene Chloride	ND	11	5.56		ppb (v/v)	Styrene	ND	5.6	5.56		ppb (v/v)
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5.6	5.56		ppb (v/v)	1,1,2,2-Tetrachloroethane	ND	2.8	5.56		ppb (v/v)
1,1-Dichloroethane	ND	2.8	5.56		ppb (v/v)	o-Xylene	73	2	5.56		ppb (v/v)
c-1,2-Dichloroethene	ND	2.8	5.56		ppb (v/v)	1,3,5-Trimethylbenzene	ND	2.8	5.56		ppb (v/v)
Chloroform	ND	2.8	5.56		ppb (v/v)	1,2,4-Trimethylbenzene	3.0	2.8	5.56		ppb (v/v)
1,2-Dichloroethane	ND	2.8	5.56		ppb (v/v)	Benzyl Chloride	ND	2.8	5.56		ppb (v/v)
1,1,1-Trichloroethane	ND	2.8	5.56		ppb (v/v)	1,3-Dichlorobenzene	ND	2.8	5.56		ppb (v/v)
Benzene	ND	2.8	5.56		ppb (v/v)	1,4-Dichlorobenzene	ND	2.8	5.56		ppb (v/v)
Carbon Tetrachloride	ND	2.8	5.56		ppb (v/v)	1,2-Dichlorobenzene	ND	2.8	5.56		ppb (v/v)
1,2-Dichloropropane	ND	2.8	5.56		ppb (v/v)	1,2,4-Trichlorobenzene	ND	2.8	5.56		ppb (v/v)
c-1,3-Dichloropropene	ND	2.8	5.56		ppb (v/v)	Hexachloro-1,3-Butadiene	ND	2.8	5.56		ppb (v/v)
t-1,3-Dichloropropene	ND	2.8	5.56		ppb (v/v)						

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: N/A  
Method: EPA TO-14A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SG-15-100	02-01-0947-27	01/23/02	Air	N/A	01/23/02	K820123A

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Dichlorodifluoromethane	1.5	0.7	1.39		ppb (v/v)	1,1,2-Trichloroethane	ND	0.70	1.39		ppb (v/v)
Chloromethane	ND	0.70	1.39		ppb (v/v)	Toluene	6.6	0.7	1.39		ppb (v/v)
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	2.8	1.39		ppb (v/v)	Trichloroethene	1.4	0.7	1.39		ppb (v/v)
Vinyl Chloride	ND	0.70	1.39		ppb (v/v)	1,2-Dibromoethane	ND	0.70	1.39		ppb (v/v)
Bromomethane	ND	0.70	1.39		ppb (v/v)	Tetrachloroethene	360	7	13.9	D	ppb (v/v)
Chloroethane	ND	0.70	1.39		ppb (v/v)	Chlorobenzene	ND	0.70	1.39		ppb (v/v)
Trichlorofluoromethane	0.72	0.70	1.39		ppb (v/v)	Ethylbenzene	67	0.70	1.39		ppb (v/v)
1,1-Dichloroethene	ND	0.70	1.39		ppb (v/v)	p/m-Xylene	260	14	13.9	D	ppb (v/v)
Methylene Chloride	ND	2.8	1.39		ppb (v/v)	Styrene	ND	1.4	1.39		ppb (v/v)
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.4	1.39		ppb (v/v)	1,1,2,2-Tetrachloroethane	ND	0.70	1.39		ppb (v/v)
1,1-Dichloroethane	ND	0.70	1.39		ppb (v/v)	o-Xylene	110	7	13.9	D	ppb (v/v)
c-1,2-Dichloroethene	ND	0.70	1.39		ppb (v/v)	1,3,5-Trimethylbenzene	2.0	0.7	1.39		ppb (v/v)
Chloroform	ND	0.70	1.39		ppb (v/v)	1,2,4-Trimethylbenzene	5.2	0.7	1.39		ppb (v/v)
1,2-Dichloroethane	ND	0.70	1.39		ppb (v/v)	Benzyl Chloride	ND	0.70	1.39		ppb (v/v)
1,1,1-Trichloroethane	1.4	0.7	1.39		ppb (v/v)	1,3-Dichlorobenzene	ND	0.70	1.39		ppb (v/v)
Benzene	0.71	0.70	1.39		ppb (v/v)	1,4-Dichlorobenzene	ND	0.70	1.39		ppb (v/v)
Carbon Tetrachloride	ND	0.70	1.39		ppb (v/v)	1,2-Dichlorobenzene	ND	0.70	1.39		ppb (v/v)
1,2-Dichloropropane	ND	0.70	1.39		ppb (v/v)	1,2,4-Trichlorobenzene	ND	0.70	1.39		ppb (v/v)
c-1,3-Dichloropropene	ND	0.70	1.39		ppb (v/v)	Hexachloro-1,3-Butadiene	ND	0.70	1.39		ppb (v/v)
t-1,3-Dichloropropene	ND	0.70	1.39		ppb (v/v)						

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: N/A  
Method: EPA TO-14A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SG-14-200	02-01-0947-28	01/23/02	Air	N/A	01/23/02	K020123A

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Dichlorodifluoromethane	3.4	0.7	1.4		ppb (v/v)	1,1,2-Trichloroethane	ND	0.70	1.4		ppb (v/v)
Chloromethane	ND	0.70	1.4		ppb (v/v)	Toluene	4.5	0.7	1.4		ppb (v/v)
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	2.8	1.4		ppb (v/v)	Trichloroethene	ND	0.70	1.4		ppb (v/v)
Vinyl Chloride	ND	0.70	1.4		ppb (v/v)	1,2-Dibromoethane	ND	0.70	1.4		ppb (v/v)
Bromomethane	ND	0.70	1.4		ppb (v/v)	Tetrachloroethene	110	2	5.6	D	ppb (v/v)
Chloroethane	ND	0.70	1.4		ppb (v/v)	Chlorobenzene	ND	0.70	1.4		ppb (v/v)
Trichlorofluoromethane	30	0.70	1.4		ppb (v/v)	Ethylbenzene	2.7	0.7	1.4		ppb (v/v)
1,1-Dichloroethene	ND	0.70	1.4		ppb (v/v)	p/m-Xylene	15	1	1.4		ppb (v/v)
Methylene Chloride	ND	2.8	1.4		ppb (v/v)	Styrene	ND	1.4	1.4		ppb (v/v)
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.4	1.4		ppb (v/v)	1,1,2,2-Tetrachloroethane	ND	0.70	1.4		ppb (v/v)
1,1-Dichloroethane	ND	0.70	1.4		ppb (v/v)	o-Xylene	6.3	0.7	1.4		ppb (v/v)
c-1,2-Dichloroethene	ND	0.70	1.4		ppb (v/v)	1,3,5-Trimethylbenzene	1.1	0.7	1.4		ppb (v/v)
Chloroform	ND	0.70	1.4		ppb (v/v)	1,2,4-Trimethylbenzene	2.6	0.7	1.4		ppb (v/v)
1,2-Dichloroethane	ND	0.70	1.4		ppb (v/v)	Benzyl Chloride	ND	0.70	1.4		ppb (v/v)
1,1,1-Trichloroethane	0.88	0.70	1.4		ppb (v/v)	1,3-Dichlorobenzene	ND	0.70	1.4		ppb (v/v)
Benzene	ND	0.70	1.4		ppb (v/v)	1,4-Dichlorobenzene	ND	0.70	1.4		ppb (v/v)
Carbon Tetrachloride	ND	0.70	1.4		ppb (v/v)	1,2-Dichlorobenzene	ND	0.70	1.4		ppb (v/v)
1,2-Dichloropropane	ND	0.70	1.4		ppb (v/v)	1,2,4-Trichlorobenzene	ND	0.70	1.4		ppb (v/v)
c-1,3-Dichloropropene	ND	0.70	1.4		ppb (v/v)	Hexachloro-1,3-Butadiene	ND	0.70	1.4		ppb (v/v)
t-1,3-Dichloropropene	ND	0.70	1.4		ppb (v/v)						

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: N/A  
Method: EPA TO-14A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	OC Batch ID
Method Blank	095-01-021-1,573	N/A	Air	N/A	01/23/02	K020123A

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Dichlorodifluoromethane	ND	0.50	1		ppb (v/v)	1,1,2-Trichloroethane	ND	0.50	1		ppb (v/v)
Chloromethane	ND	0.50	1		ppb (v/v)	Toluene	ND	0.50	1		ppb (v/v)
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	2.0	1		ppb (v/v)	Trichloroethene	ND	0.50	1		ppb (v/v)
Vinyl Chloride	ND	0.50	1		ppb (v/v)	1,2-Dibromoethane	ND	0.50	1		ppb (v/v)
Bromomethane	ND	0.50	1		ppb (v/v)	Tetrachloroethene	ND	0.50	1		ppb (v/v)
Chloroethane	ND	0.50	1		ppb (v/v)	Chlorobenzene	ND	0.50	1		ppb (v/v)
Trichlorofluoromethane	ND	0.50	1		ppb (v/v)	Ethylbenzene	ND	0.50	1		ppb (v/v)
1,1-Dichloroethene	ND	0.50	1		ppb (v/v)	p/m-Xylene	ND	1.0	1		ppb (v/v)
Methylene Chloride	ND	2.0	1		ppb (v/v)	Styrene	ND	1.0	1		ppb (v/v)
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	1		ppb (v/v)	1,1,2,2-Tetrachloroethane	ND	0.50	1		ppb (v/v)
1,1-Dichloroethane	ND	0.50	1		ppb (v/v)	o-Xylene	ND	0.50	1		ppb (v/v)
c-1,2-Dichloroethene	ND	0.50	1		ppb (v/v)	1,3,5-Trimethylbenzene	ND	0.50	1		ppb (v/v)
Chloroform	ND	0.50	1		ppb (v/v)	1,2,4-Trimethylbenzene	ND	0.50	1		ppb (v/v)
1,2-Dichloroethane	ND	0.50	1		ppb (v/v)	Benzyl Chloride	ND	0.50	1		ppb (v/v)
1,1,1-Trichloroethane	ND	0.50	1		ppb (v/v)	1,3-Dichlorobenzene	ND	0.50	1		ppb (v/v)
Benzene	ND	0.50	1		ppb (v/v)	1,4-Dichlorobenzene	ND	0.50	1		ppb (v/v)
Carbon Tetrachloride	ND	0.50	1		ppb (v/v)	1,2-Dichlorobenzene	ND	0.50	1		ppb (v/v)
1,2-Dichloropropane	ND	0.50	1		ppb (v/v)	1,2,4-Trichlorobenzene	ND	0.50	1		ppb (v/v)
c-1,3-Dichloropropene	ND	0.50	1		ppb (v/v)	Hexachloro-1,3-Butadiene	ND	0.50	1		ppb (v/v)
t-1,3-Dichloropropene	ND	0.50	1		ppb (v/v)						



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: N/A  
Method: EPA TO-14A

Project: LAUSD-East Valley M.S. / 47127

Page 10 of 10

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	095-01-021-1,574	N/A	Air	N/A	01/25/02	K020125A

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Dichlorodifluoromethane	ND	0.50	1		ppb (v/v)	1,1,2-Trichloroethane	ND	0.50	1		ppb (v/v)
Chloromethane	ND	0.50	1		ppb (v/v)	Toluene	ND	0.50	1		ppb (v/v)
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	2.0	1		ppb (v/v)	Trichloroethene	ND	0.50	1		ppb (v/v)
Vinyl Chloride	ND	0.50	1		ppb (v/v)	1,2-Dibromoethane	ND	0.50	1		ppb (v/v)
Bromomethane	ND	0.50	1		ppb (v/v)	Tetrachloroethene	ND	0.50	1		ppb (v/v)
Chloroethane	ND	0.50	1		ppb (v/v)	Chlorobenzene	ND	0.50	1		ppb (v/v)
Trichlorofluoromethane	ND	0.50	1		ppb (v/v)	Ethylbenzene	ND	0.50	1		ppb (v/v)
1,1-Dichloroethene	ND	0.50	1		ppb (v/v)	p/m-Xylene	ND	1.0	1		ppb (v/v)
Methylene Chloride	ND	2.0	1		ppb (v/v)	Styrene	ND	1.0	1		ppb (v/v)
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.0	1		ppb (v/v)	1,1,2,2-Tetrachloroethane	ND	0.50	1		ppb (v/v)
1,1-Dichloroethane	ND	0.50	1		ppb (v/v)	o-Xylene	ND	0.50	1		ppb (v/v)
c-1,2-Dichloroethene	ND	0.50	1		ppb (v/v)	1,3,5-Trimethylbenzene	ND	0.50	1		ppb (v/v)
Chloroform	ND	0.50	1		ppb (v/v)	1,2,4-Trimethylbenzene	ND	0.50	1		ppb (v/v)
1,2-Dichloroethane	ND	0.50	1		ppb (v/v)	Benzyl Chloride	ND	0.50	1		ppb (v/v)
1,1,1-Trichloroethane	ND	0.50	1		ppb (v/v)	1,3-Dichlorobenzene	ND	0.50	1		ppb (v/v)
Benzene	ND	0.50	1		ppb (v/v)	1,4-Dichlorobenzene	ND	0.50	1		ppb (v/v)
Carbon Tetrachloride	ND	0.50	1		ppb (v/v)	1,2-Dichlorobenzene	ND	0.50	1		ppb (v/v)
1,2-Dichloropropane	ND	0.50	1		ppb (v/v)	1,2,4-Trichlorobenzene	ND	0.50	1		ppb (v/v)
c-1,3-Dichloropropene	ND	0.50	1		ppb (v/v)	Hexachloro-1,3-Butadiene	ND	0.50	1		ppb (v/v)
t-1,3-Dichloropropene	ND	0.50	1		ppb (v/v)						

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Sampled: 01/23/02  
Date Received: 01/23/02  
Date Analyzed: 01/23/02

Attn: Steve Williams  
RE: LAUSD-East Valley M.S. / 47127

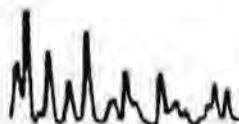
Work Order No.: 02-01-0947  
Method: SCAQMD 25.1  
Page 1 of 1

All concentrations are reported in ppm (v/v).

<u>Sample Number</u>	<u>Methane Concentration</u>	<u>Reporting Limit</u>
SG-10-20	ND	1
SG-10-10	1	1
SG-4-20	ND	1
SG-4-10	ND	1
Method Blank	ND	1

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL intact and with chain-of-custody attached.



**Quality Control - Spike/Spike Duplicate**

Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/23/02  
 Work Order No: 02-01-0947  
 Preparation: Total Digestion  
 Method: EPA 6010B

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB-31-0.5	Solid	ICP 3300	01/23/02	01/24/02	012302ms9

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	59	53	50-115	11	0-20	
Arsenic	87	86	75-125	1	0-20	
Barium	94	88	75-125	3	0-20	
Beryllium	89	87	75-125	2	0-20	
Cadmium	93	90	75-125	3	0-20	
Chromium (Total)	92	90	75-125	2	0-20	
Cobalt	95	92	75-125	3	0-20	
Copper	95	92	75-125	3	0-20	
Lead	90	87	75-125	3	0-20	
Molybdenum	90	87	75-125	3	0-20	
Nickel	93	91	75-125	2	0-20	
Selenium	89	85	75-125	5	0-20	
Silver	93	90	75-125	4	0-20	
Thallium	84	82	75-125	3	0-20	
Vanadium	91	90	75-125	1	0-20	
Zinc	89	86	75-125	2	0-20	



**Quality Control - Laboratory Control Sample**

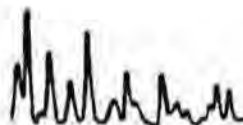
Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/23/02  
 Work Order No: 02-01-0947  
 Preparation: Total Digestion  
 Method: EPA 6010B

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-002-3,068	Solid	ICP 3300	01/24/02	020123-I	020123/ce9

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Antimony	50.0	47.8	96	80-120	
Arsenic	50.0	44.6	89	80-120	
Barium	50.0	49.7	99	80-120	
Beryllium	50.0	48.5	97	80-120	
Cadmium	50.0	51.4	103	80-120	
Chromium (Total)	50.0	50.4	101	80-120	
Cobalt	50.0	53.9	108	80-120	
Copper	50.0	49.4	99	80-120	
Lead	50.0	49.8	100	80-120	
Molybdenum	50.0	50.2	100	80-120	
Nickel	50.0	52.1	104	80-120	
Selenium	50.0	47.5	95	80-120	
Silver	25.0	24.0	96	80-120	
Thallium	50.0	50.6	101	80-120	
Vanadium	50.0	49.5	99	80-120	
Zinc	50.0	51.7	103	80-120	





**Quality Control - Spike/Spike Duplicate**

Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/23/02  
 Work Order No: 02-01-0947  
 Preparation: Total Digestion  
 Method: EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB-31-0.5	Solid	Mercury	01/23/02	01/24/02	012302ms5

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	123	122	76-136	0	0-16	



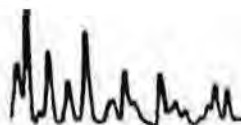
Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: Total Digestion  
Method: EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-04-007-1,289	Solid	Mercury	01/24/02	020123 I	020123lec5

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Mercury	0.835	0.906	109	82-124	



**QUALITY ASSURANCE SUMMARY**

Method EPA 8270C (Solids)

Earth Tech  
Page 1 of 1

Work Order No.: 02-01-0947  
Date Analyzed: 01/24/02

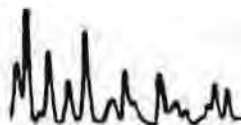
**Surrogate Recoveries (in %)**

<u>Sample Number</u>	<u>S1</u>	<u>S2</u>	<u>S3</u>	<u>S4</u>	<u>S5</u>	<u>S6</u>
MS SB-13-7	81	84	81	80	75	77
MSD SB-13-7	76	78	75	73	67	71
LCS 0201236	104	108	104	101	105	103

Surrogate Compound

Solid %REC  
Acceptable Limits

S1 > 2-Fluorophenol	31 - 142
S2 > Phenol-d <sub>6</sub>	30 - 136
S3 > Nitrobenzene-d <sub>5</sub>	28 - 139
S4 > 2-Fluorobiphenyl	33 - 144
S5 > 2,4,6-Tribromophenol	24 - 152
S6 > p-Terphenyl-d14	23 - 160



**Quality Control - Spike/Spike Duplicate**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB-13-7	Solid	GC/MS P	01/23/02	01/24/02	0201094710

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	86	79	53-118	8	0-19	
2-Chlorophenol	85	78	60-119	8	0-18	
1,4-Dichlorobenzene	81	75	56-131	8	0-18	
N-Nitroso-di-n-propylamine	89	82	64-123	7	0-18	
1,2,4-Trichlorobenzene	75	69	52-144	8	0-17	
4-Chloro-3-Methylphenol	86	80	45-135	7	0-20	
Acenaphthene	89	81	45-152	9	0-18	
4-Nitrophenol	96	86	45-135	11	0-20	
2,4-Dinitrotoluene	98	90	42-128	9	0-23	
Pentachlorophenol	91	82	45-135	11	0-20	
Pyrene	78	73	45-135	7	0-20	



**Quality Control - Laboratory Control Sample**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-04-010-1,175	Solid	GC/MS F	01/24/02	24JAN005	0201235
Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Phenol	10	11	107	67-118	
2-Chlorophenol	10	11	106	72-119	
1,4-Dichlorobenzene	10	10	101	69-118	
N-Nitroso-di-n-propylamine	10	11	111	70-112	
1,2,4-Trichlorobenzene	10	9.4	94	65-135	
4-Chloro-3-Methylphenol	10	11	111	45-135	
Acenaphthene	10	11	109	61-142	
4-Nitrophenol	10	12	123	45-135	
2,4-Dinitrotoluene	10	12	124	47-137	
Pentachlorophenol	10	12	120	45-135	
Pyrene	10	9.9	99	45-135	

**QUALITY ASSURANCE SUMMARY**  
Method EPA TO-14A

Earth Tech  
Page 1 of 1

Work Order No.: 02-01-0947  
Date Analyzed: 1/23/02

**Surrogate Recoveries (in %)**

<u>Sample Number</u>	<u>S1</u>
SG-10-20	109
SG-10-10	107
SC-4-20	112
SG-4-10	113
SG-11-9D	117
SG-10D	115
SG-14-20D	113
Method Blank 095-01-021-1573	69
LCS K020123A	106
LCSD K020123A	105
SG-15-20D	111
Method Blank 095-01-021-1574	78
LCS K020125A	108
LCSD K020125A	108

\* Surrogate outside acceptable limits.

Surrogate Compound

%REC  
Acceptable Limits

S1 > 1,4-Bromofluorobenzene

75 - 125



**Quality Control - LCS/LCS Duplicate**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: N/A  
Method: EPA TO-14A

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-1,573	Air	GC/MS K	N/A	01/23/02	K020123A

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Vinyl Chloride	106	108	60-140	3	0-30	
1,2-Dichloroethane	106	106	60-140	0	0-30	
Benzene	103	105	60-140	2	0-30	
Carbon Tetrachloride	104	103	60-140	1	0-30	
1,2-Dichloropropane	102	104	60-140	1	0-30	
c-1,3-Dichloropropene	110	110	60-140	0	0-30	
1,1,2-Trichloroethane	109	108	60-140	1	0-30	
Toluene	106	107	60-140	2	0-30	
Trichloroethene	102	103	60-140	1	0-30	
1,2-Dibromoethane	111	112	60-140	1	0-30	
Tetrachloroethene	104	105	60-140	1	0-30	
Ethylbenzene	112	114	60-140	2	0-30	
p/m-Xylene	111	112	60-140	1	0-30	
Bromoform	112	112	60-140	1	0-30	
o-Xylene	111	112	60-140	1	0-30	
1,4-Dichlorobenzene	96	98	60-140	2	0-30	
1,2-Dichlorobenzene	113	116	60-140	2	0-30	

**Quality Control - LCS/LCS Duplicate**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/23/02  
Work Order No: 02-01-0947  
Preparation: N/A  
Method: EPA TO-14A

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-021-1,574	Air	GC/MS K	N/A	01/25/02	K020125A

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Vinyl Chloride	112	115	60-140	3	0-30	
1,2-Dichloroethane	104	107	60-140	3	0-30	
Benzene	102	108	60-140	5	0-30	
Carbon Tetrachloride	101	105	60-140	4	0-30	
1,2-Dichloropropane	101	106	60-140	4	0-30	
c-1,3-Dichloropropene	107	112	60-140	5	0-30	
1,1,2-Trichloroethane	105	110	60-140	4	0-30	
Toluene	102	105	60-140	2	0-30	
Trichloroethene	100	106	60-140	5	0-30	
1,2-Dibromoethane	107	109	60-140	2	0-30	
Tetrachloroethene	101	103	60-140	3	0-30	
Ethylbenzene	110	112	60-140	2	0-30	
p/m-Xylene	109	110	60-140	1	0-30	
Bromoform	105	109	60-140	3	0-30	
o-Xylene	108	110	60-140	2	0-30	
1,4-Dichlorobenzene	90	95	60-140	6	0-30	
1,2-Dichlorobenzene	100	109	60-140	9	0-30	



**QUALITY ASSURANCE SUMMARY**

Method SCAQMD 25.1M

Earth Tech  
Page 1 of 1

Work Order No.: 02-01-0947  
Date Analyzed: 01/23/02

**LCS/LCS Duplicate**

<u>Analyte</u>	<u>LCS%REC</u>	<u>LCSD%REC</u>	<u>Control Limits</u>	<u>%RPD</u>	<u>Control Limits</u>
Methane	106	106	80 - 120	0	0 - 20

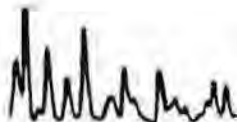


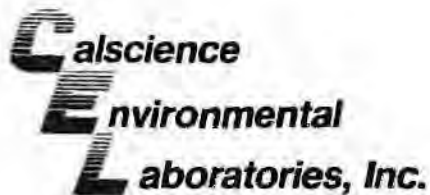
## GLOSSARY OF TERMS AND QUALIFIERS

Work Order Number: 02-01-0947

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<u>Qualifier</u>	<u>Definition</u>
D	The sample data was reported from a diluted analysis.
J	Analyte was detected at a concentration below the reporting limit. Reported value is estimated.
ND	Not detected at indicated reporting limit.
X	% Recovery and/or RPD out-of-range.





February 14, 2002  
PM07802

Steve Williams  
Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Subject: Calscience Work Order No.: 02-01-1011  
Client Reference: LAUSD-East Valley M.S. /47127

Dear Mr. Williams:

Calscience Environmental Laboratories, Inc. (Calscience) is pleased to submit herewith the subject analytical report. The narrative presented below summarizes our analytical effort and clarifies any quality control anomalies which appear in the report.

#### **Sample Condition on Receipt**

Forty-four soil samples and one water samples were received as part of this Work Order on January 24, 2002. All samples were transferred to the laboratory in an ice-chest following strict chain-of-custody procedures. The temperature of the ice-chest was measured upon arrival in the laboratory and was within acceptable limit (4°C). The samples were logged into the Laboratory Information Management System (LIMS), given laboratory identification numbers, and stored in refrigeration units pending analysis.

#### **Data Summary**

Data is presented on a wet weight basis.

Included in this report is the physical testing report that was performed by PTS laboratories.

#### **Holding Times**

All holding time requirements were met.



### Calibration

Frequency and control criteria for initial and continuing calibration verifications were met.

### Blanks

The method blank data showed non-detectable levels for all constituents, with the exception of trace levels of copper for batch 020124lcs10.

### Matrix Spikes

Matrix spikes (MS) and matrix spike duplicates (MSD) were performed at required frequencies. All recoveries were within acceptable limits, with the exception of silver for batch 012402ms9. The recoveries were outside the QC limits for the MS and MSD. However, the corresponding Laboratory Control Sample (LCS) recovery was within control limits, indicating a matrix interference effect. Therefore, the data is released without further action or qualification.

### Laboratory Control Samples


The Laboratory Control Sample (LCS) analysis was performed at the required frequency. All recoveries were within acceptable limits.

### Surrogates

Surrogate recoveries for all samples were within acceptable control limits.

If there are any questions regarding this report, please contact the undersigned at (714) 895-5494.

Sincerely,

  
Calscience Environmental  
Laboratories, Inc.  
Marycarol Valenzuela  
Project Manager

  
Michael J. Crisostomo  
Quality Assurance Manager



(101)

1054

Project Number 47127		Project Name/Client EAST VALLEY INC.		Custody Seal #		Earth Tech Cooler #	
Sample Custodian: (Signature) <i>Lawrence Brown</i>				Analysis Required		Matrix	
Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	PID Reading (ppm)	Label Number
1	SB-12-0.5	1/24/02	0650	X		0	8270
2	SB-12-7		0654				6010
3	SB-12-10		0659				HOLD
4	SB-12-12		0704				HOLD
5	SB-12-PHYSICAL		0650				PHYSICAL PROPERTIES DENSITY, ETC.
6	SB-16-0.5		0717				X
7	SB-16-7		0724				X
8	SB-16-10		0731				HOLD
9	SB-16-12		0736				HOLD
10	SB-17-0.5		0759				X
11	SB-17-7		0803				X
12	SB-17-10		0810				HOLD
13	SB-17-12		0817				HOLD
14	SB-16-0.5		0835				X
15	SB-16-7		0840				X
16	SB-16-10		0845				HOLD
17	SB-16-12		0856				HOLD
18	SB-16-PHYSICAL		0855	X		0	X

Relinquished by: (Signature) <i>Lawrence Brown</i>	Date / Time	Received by: (Signature) <i>Steve Williams</i>	Disposed of by: (Signature)	Items:	Date / Time
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date / Time

Send Lab Results To: <b>STEVE WILLIAMS</b> 100 W. BROADWAY STE 240 LONG BEACH CA 90802 fax (562) 951-2086	Remarks: <b>24 HR TAT</b> (METALS 48 HR) Federal Express Airbill No.: Lab:	Check Delivery Method: <input type="checkbox"/> Samples delivered in person <input type="checkbox"/> Common carrier	Laboratory Receiving Notes: Custody Seal Intact? Temp. of Shipping Container: Sample Condition:
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White Copy - Lab

Yellow Copy - File

Pink Copy - Client

1011

Project Number 47127		Project Name/Client LAUSD EAST VALLEY M-S.		Analysis Required										Custody Seal #		Earth Tech Cooler #	
Sample Custodian: (Signature) <i>Lawrence Brown</i>																	
Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	PID Reading (ppm)	Label Number	8070	6010	8082	8081	PHYSICAL PROP Density, etc.	Matrix				
													Sample Type		Sample Container		
1	SB-15-0.5	1/24/02	0912	X		0		X	X						X	X	
2	SB-15-7		0914					X	X								
3	SB-15-10		0918					HOLD									
4	SB-15-12		0925					HOLD									
5	SB-2-2		1042					X	X	X							
6	SB-2-3		1042					X	X	X							
7	SB-2-5		1044					X	X	X							
8	SB-3-2		1052					X	X		X						
9	SB-3-5		1056					X	X		X						
10	SB-9-0.5		1124					X	X								
11	SB-9-7		1127					X	X								
12	SB-9-10		1133					HOLD									
13	SB-9-12		1139					HOLD									
14	SB-9-PHYSICAL		1124									X					
15	SB-26-0.5		1205					X	X								
16	SB-26-7		1209					X	X								
17	SB-26-10		1214					HOLD									
18	SB-26-12		1221			0		HOLD						X	X		
Relinquished by: (Signature) <i>Lawrence Brown</i>		Date / Time		Received by: (Signature)				Disposed of by: (Signature)				Items:		Date / Time			
Relinquished by: (Signature)		Date / Time		Received by: (Signature)				Disposed of by: (Signature)				Items:		Date / Time			
Send Lab Results To: STEVE WILLIAMS 100 W. BROADWAY ST 240 LONG BEACH CA 90802 fax (562) 951-2006				Remarks: 26 HR TAX (METALS 40 HR) Federal Express Airbill No.: Lab:				Check Delivery Method: <input type="checkbox"/> Samples delivered in person <input type="checkbox"/> Common carrier				Laboratory Receiving Notes: Custody Seal Intact? Temp. of Shipping Container: Sample Condition:					

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Yellow Copy - File

Pink Copy - Client

304

1011

Project Number 47127		Project Name/Client LAUSD EAST VALLEY H.S.				Custody Seal #		Earth Tech Cooler #									
Sample Custodian: (Signature) <i>Lawrence Brown</i>						Analysis Required		Matrix									
Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	PID Reading (ppm)	Label Number	8270 (SVOCs)	6010 (Metals)	8082 (PCBs)	8081 (Pest)					Sample Type	Sample Container
1	SB-25-0.5	1/24/02	1240	X		0		X	X	X						X	X
2	SB-25-7		1304					X	X	X							
3	SB-25-10		1306					Hold									
4	SB-25-12		1309					Hold									
5	SB-24-0.5		1330					X	X								
6	SB-24-7		1335					X	X								
7	SB-24-10		1340					Hold									
8	SB-24-12		1342			0		Hold								X	X
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	

Relinquished by: (Signature) <i>Lawrence Brown</i>	Date / Time 1/24/02 1610	Received by: (Signature) <i>Steve Williams</i>	Disposed of by: (Signature)	Items:	Date / Time
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date / Time

Send Lab Results To: STEVE WILLIAMS 100 W. BROADWAY STE 240 LONG BEACH CA 90802 fax (562) 951-2086	Remarks: 24 HR TAT (ASPH METALS) Federal Express Airbill No.: Lab:	Check Delivery Method: <input type="checkbox"/> Samples delivered in person <input type="checkbox"/> Common carrier	Laboratory Receiving Notes: Custody Seal Intact? Temp. of Shipping Container: Sample Condition:
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1011

F514/Earth.Sci



**CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.**  
**Sample Summary Report**

**WORK ORDER #:** 02-01-1011

**QAPP:** 0117

#	Client Sample ID	Matrix	Date Collected	NoC	Comment
1	SB-12-0.5	S	01/24/2002	1	
2	SB-12-7	S	01/24/2002	1	
3	SB-12-10	S	01/24/2002	1	
4	SB-12-12	S	01/24/2002	1	
5	SB-12-PHYSICAL	S	01/24/2002	1	
6	SB-18-0.5	S	01/24/2002	1	
7	SB-18-7	S	01/24/2002	1	
8	SB-18-10	S	01/24/2002	1	
9	SB-18-12	S	01/24/2002	1	
10	SB-17-0.5	S	01/24/2002	1	
11	SB-17-7	S	01/24/2002	1	
12	SB-17-10	S	01/24/2002	1	
13	SB-17-12	S	01/24/2002	1	
14	SB-16-0.5	S	01/24/2002	1	
15	SB-16-7	S	01/24/2002	1	
16	SB-16-10	S	01/24/2002	1	
17	SB-16-12	S	01/24/2002	1	
18	SB-16-PHYSICAL	S	01/24/2002	1	
19	SB-15-0.5	S	01/24/2002	1	
20	SB-15-7	S	01/24/2002	1	
21	SB-15-10	S	01/24/2002	1	
22	SB-15-12	S	01/24/2002	1	
23	SB-2-2	S	01/24/2002	1	
24	SB-2-3	S	01/24/2002	1	
25	SB-2-5	S	01/24/2002	1	
26	SB-3-2	S	01/24/2002	1	
27	SB-3-5	S	01/24/2002	1	
28	SB-9-0.5	S	01/24/2002	1	
29	SB-9-7	S	01/24/2002	1	
30	SB-9-10	S	01/24/2002	1	
31	SB-9-12	S	01/24/2002	1	
32	SB-9-PHYSICAL	S	01/24/2002	1	

**CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.**  
**Sample Summary Report**

WORK ORDER #: 02-01-1011

QAPP: 0117

[illegible]

WORK ORDER #: 02-01-1011

Cooler 10 of 20

## SAMPLE RECEIPT FORM

CLIENT: Earth Tech

DATE: 1-24-02

### TEMPERATURE - SAMPLES RECEIVED BY:

#### CALSCIENCE COURIER:

- ☐ Chilled, cooler with temperature blank provided.  
☐ Chilled, cooler without temperature blank.  
☐ Chilled and placed in cooler with wet ice.  
☐ Ambient and placed in cooler with wet ice.  
☐ Ambient temperature.  
☐ °C Temperature blank.

#### LABORATORY (Other than Calscience Courier):

- ☐ °C Temperature blank.  
4 °C IR thermometer.  
☐ Ambient temperature.

Initial: RL

### CUSTODY SEAL INTACT:

Sample(s): \_\_\_\_\_ Cooler: \_\_\_\_\_ No (Not Intact): \_\_\_\_\_ Not Applicable (N/A): /  
Initial: RL

### SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples.....	<u>/</u>		
Sample container label(s) consistent with custody papers.....	<u>OK</u>	<u>✓</u>	
Sample container(s) intact and good condition.....	<u>/</u>		
Correct containers for analyses requested.....	<u>/</u>		
Proper preservation noted on sample label(s).....			<u>/</u>
VOA vial(s) free of headspace.....			<u>/</u>
Tedlar bag(s) free of condensation.....			<u>/</u>

Initial: R

### COMMENTS:

SB-9 - PHYSICAL not received  
SB-16 - PHYSICAL received 2 sleeves.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-12-0.5	02-01-1011-1	01/24/02	Solid	01/24/02	01/25/02	020124lc10

Comment(s): Mercury was analyzed on 1/25/2002 10:30:37 AM with batch 020124lcs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0244	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	54.0	0.5	1		mg/kg	Nickel	3.68	0.25	1		mg/kg
Beryllium	0.124	0.250	1	J	mg/kg	Selenium	0.436	0.750	1	J	mg/kg
Cadmium	0.0249	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	4.55	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	4.22	0.25	1		mg/kg	Vanadium	13.0	0.2	1		mg/kg
Copper	5.20	0.50	1		mg/kg	Zinc	22.0	1.0	1		mg/kg
Lead	1.73	0.50	1		mg/kg						

SB-12-7	02-01-1011-2	01/24/02	Solid	01/24/02	01/25/02	020124lc10
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Comment(s): Mercury was analyzed on 1/25/2002 10:33:36 AM with batch 020124lcs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0219	0.0835	1	J	mg/kg
Arsenic	0.176	0.750	1	J	mg/kg	Molybdenum	0.0648	0.250	1	J	mg/kg
Barium	65.5	0.5	1		mg/kg	Nickel	4.09	0.25	1		mg/kg
Beryllium	0.146	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.0314	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	5.23	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	4.62	0.25	1		mg/kg	Vanadium	14.9	0.2	1		mg/kg
Copper	8.83	0.50	1		mg/kg	Zinc	26.1	1.0	1		mg/kg
Lead	1.35	0.50	1		mg/kg						

SB-18-0.5	02-01-1011-6	01/24/02	Solid	01/24/02	01/25/02	020124lc10
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Comment(s): Mercury was analyzed on 1/25/2002 10:36:37 AM with batch 020124lcs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0464	0.0835	1	J	mg/kg
Arsenic	0.391	0.750	1	J	mg/kg	Molybdenum	0.0522	0.250	1	J	mg/kg
Barium	92.3	0.5	1		mg/kg	Nickel	7.69	0.25	1		mg/kg
Beryllium	0.241	0.250	1	J	mg/kg	Selenium	0.548	0.750	1	J	mg/kg
Cadmium	0.129	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	9.93	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	7.57	0.25	1		mg/kg	Vanadium	24.7	0.2	1		mg/kg
Copper	11.5	0.5	1		mg/kg	Zinc	42.0	1.0	1		mg/kg
Lead	5.49	0.50	1		mg/kg						



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-18-7	02-01-1011-7	01/24/02	Solid	01/24/02	01/25/02	020124lc10

Comment(s): Mercury was analyzed on 1/25/2002 10:39:38 AM with batch 020124lcs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0580	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	90.0	0.5	1		mg/kg	Nickel	5.81	0.25	1		mg/kg
Beryllium	0.183	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.0815	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	7.55	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	6.72	0.25	1		mg/kg	Vanadium	21.2	0.2	1		mg/kg
Copper	8.19	0.50	1		mg/kg	Zinc	32.8	1.0	1		mg/kg
Lead	1.71	0.50	1		mg/kg						

SB-17-0.5	02-01-1011-10	01/24/02	Solid	01/24/02	01/25/02	020124lc10
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Comment(s): Mercury was analyzed on 1/25/2002 10:42:39 AM with batch 020124lcs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0154	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	83.2	0.5	1		mg/kg	Nickel	6.62	0.25	1		mg/kg
Beryllium	0.223	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.111	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	8.38	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	6.80	0.25	1		mg/kg	Vanadium	20.8	0.2	1		mg/kg
Copper	9.31	0.50	1		mg/kg	Zinc	36.4	1.0	1		mg/kg
Lead	4.73	0.50	1		mg/kg						

SB-17-7	02-01-1011-11	01/24/02	Solid	01/24/02	01/25/02	020124lc10
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Comment(s): Mercury was analyzed on 1/25/2002 10:45:41 AM with batch 020124lcs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	ND	0.0835	1		mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	122	0.500	1		mg/kg	Nickel	7.73	0.25	1		mg/kg
Beryllium	0.228	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.108	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	10.3	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	8.78	0.25	1		mg/kg	Vanadium	28.9	0.2	1		mg/kg
Copper	10.6	0.5	1		mg/kg	Zinc	41.7	1.0	1		mg/kg
Lead	1.96	0.50	1		mg/kg						

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-16-0.5	02-01-1011-14	01/24/02	Solid	01/24/02	01/25/02	020124ic10

Comment(s): Mercury was analyzed on 1/25/2002 10:48:44 AM with batch 020124ics6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0211	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	91.5	0.5	1		mg/kg	Nickel	7.07	0.25	1		mg/kg
Beryllium	0.210	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.0948	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	9.28	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	7.62	0.25	1		mg/kg	Vanadium	23.6	0.2	1		mg/kg
Copper	9.56	0.50	1		mg/kg	Zinc	39.2	1.0	1		mg/kg
Lead	2.41	0.50	1		mg/kg						

SB-16-7	02-01-1011-15	01/24/02	Solid	01/24/02	01/25/02	020124ic10
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Comment(s): Mercury was analyzed on 1/25/2002 10:51:47 AM with batch 020124ics6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0427	0.0835	1	J	mg/kg
Arsenic	0.194	0.750	1	J	mg/kg	Molybdenum	0.0587	0.250	1	J	mg/kg
Barium	94.3	0.5	1		mg/kg	Nickel	7.01	0.25	1		mg/kg
Beryllium	0.228	0.250	1	J	mg/kg	Selenium	0.295	0.750	1	J	mg/kg
Cadmium	0.0827	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	8.93	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	6.93	0.25	1		mg/kg	Vanadium	22.0	0.2	1		mg/kg
Copper	9.58	0.50	1		mg/kg	Zinc	37.4	1.0	1		mg/kg
Lead	2.95	0.50	1		mg/kg						

SB-15-0.5	02-01-1011-19	01/24/02	Solid	01/24/02	01/25/02	020124ic10
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Comment(s): Mercury was analyzed on 1/25/2002 10:54:50 AM with batch 020124ics6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0424	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.0347	0.250	1	J	mg/kg
Barium	84.9	0.5	1		mg/kg	Nickel	7.72	0.25	1		mg/kg
Beryllium	0.243	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.112	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	10.1	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	7.44	0.25	1		mg/kg	Vanadium	24.4	0.2	1		mg/kg
Copper	10.8	0.5	1		mg/kg	Zinc	38.7	1.0	1		mg/kg
Lead	3.03	0.50	1		mg/kg						

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-15-7	02-01-1011-20	01/24/02	Solid	01/24/02	01/25/02	0201241c10

Comment(s): Mercury was analyzed on 1/25/2002 10:57:53 AM with batch 0201241cs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0179	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.0638	0.250	1	J	mg/kg
Barium	63.5	0.5	1		mg/kg	Nickel	4.87	0.25	1		mg/kg
Beryllium	0.161	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.0662	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	6.50	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	4.80	0.25	1		mg/kg	Vanadium	14.8	0.2	1		mg/kg
Copper	9.25	0.50	1		mg/kg	Zinc	26.3	1.0	1		mg/kg
Lead	2.14	0.50	1		mg/kg						

SB-2-2	02-01-1011-23	01/24/02	Solid	01/24/02	01/25/02	0201241c10
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Comment(s): Mercury was analyzed on 1/25/2002 11:07:05 AM with batch 0201241cs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0235	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	123	0.500	1		mg/kg	Nickel	7.39	0.25	1		mg/kg
Beryllium	0.212	0.250	1	J	mg/kg	Selenium	0.305	0.750	1	J	mg/kg
Cadmium	0.175	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	9.67	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	8.16	0.25	1		mg/kg	Vanadium	28.3	0.2	1		mg/kg
Copper	12.4	0.5	1		mg/kg	Zinc	47.0	1.0	1		mg/kg
Lead	5.98	0.50	1		mg/kg						

SB-2-3	02-01-1011-24	01/24/02	Solid	01/24/02	01/25/02	0201241c10
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Comment(s): Mercury was analyzed on 1/25/2002 11:10:10 AM with batch 0201241cs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0193	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	79.4	0.5	1		mg/kg	Nickel	5.88	0.25	1		mg/kg
Beryllium	0.205	0.250	1	J	mg/kg	Selenium	0.275	0.750	1	J	mg/kg
Cadmium	0.0817	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	8.07	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	6.27	0.25	1		mg/kg	Vanadium	21.8	0.2	1		mg/kg
Copper	8.49	0.50	1		mg/kg	Zinc	30.3	1.0	1		mg/kg
Lead	1.99	0.50	1		mg/kg						



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-2-5	02-01-1011-25	01/24/02	Solid	01/24/02	01/28/02	020124lc10

Comment(s): Mercury was analyzed on 1/25/2002 11:13:15 AM with batch 020124lcs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0287	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	39.7	0.5	1		mg/kg	Nickel	2.07	0.25	1		mg/kg
Beryllium	0.0793	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	ND	0.500	1		mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	2.62	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	2.38	0.25	1		mg/kg	Vanadium	7.84	0.25	1		mg/kg
Copper	3.55	0.50	1		mg/kg	Zinc	15.2	1.0	1		mg/kg
Lead	0.828	0.500	1		mg/kg						

SB-3-2	02-01-1011-26	01/24/02	Solid	01/24/02	01/25/02	020124lc10
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Comment(s): Mercury was analyzed on 1/25/2002 11:16:21 AM with batch 020124lcs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0190	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	101	0.500	1		mg/kg	Nickel	7.35	0.25	1		mg/kg
Beryllium	0.216	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.113	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	9.62	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	7.81	0.25	1		mg/kg	Vanadium	24.6	0.2	1		mg/kg
Copper	10.3	0.5	1		mg/kg	Zinc	41.7	1.0	1		mg/kg
Lead	2.36	0.50	1		mg/kg						

SB-3-5	02-01-1011-27	01/24/02	Solid	01/24/02	01/25/02	020124lc10
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Comment(s): Mercury was analyzed on 1/25/2002 11:19:26 AM with batch 020124lcs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0373	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	59.2	0.5	1		mg/kg	Nickel	3.65	0.25	1		mg/kg
Beryllium	0.129	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.0191	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	4.59	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	4.32	0.25	1		mg/kg	Vanadium	14.2	0.2	1		mg/kg
Copper	5.08	0.50	1		mg/kg	Zinc	21.9	1.0	1		mg/kg
Lead	1.23	0.50	1		mg/kg						



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-9-0.5	02-01-1011-28	01/24/02	Solid	01/24/02	01/25/02	0201241c10

Comment(s): Mercury was analyzed on 1/25/2002 11:22:29 AM with batch 0201241cs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0175	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.0592	0.250	1	J	mg/kg
Barium	77.8	0.5	1		mg/kg	Nickel	6.39	0.25	1		mg/kg
Beryllium	0.203	0.250	1	J	mg/kg	Selenium	0.424	0.750	1	J	mg/kg
Cadmium	0.0932	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	7.94	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	6.37	0.25	1		mg/kg	Vanadium	20.3	0.2	1		mg/kg
Copper	9.31	0.50	1		mg/kg	Zinc	35.4	1.0	1		mg/kg
Lead	4.72	0.50	1		mg/kg						

SB-9-7 02-01-1011-29 01/24/02 Solid 01/24/02 01/25/02 0201241c10

Comment(s): Mercury was analyzed on 1/25/2002 11:25:28 AM with batch 0201241cs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0425	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	162	0.500	1		mg/kg	Nickel	12.5	0.2	1		mg/kg
Beryllium	0.342	0.250	1		mg/kg	Selenium	1.54	0.75	1		mg/kg
Cadmium	0.219	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	15.8	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	12.4	0.2	1		mg/kg	Vanadium	40.0	0.2	1		mg/kg
Copper	19.9	0.5	1		mg/kg	Zinc	59.5	1.0	1		mg/kg
Lead	3.00	0.50	1		mg/kg						

SB-26-0.5 02-01-1011-33 01/24/02 Solid 01/24/02 01/25/02 0201241c10

Comment(s): Mercury was analyzed on 1/25/2002 11:28:28 AM with batch 0201241cs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.154	0.083	1		mg/kg
Arsenic	0.142	0.750	1	J	mg/kg	Molybdenum	0.415	0.250	1		mg/kg
Barium	199	0.500	1		mg/kg	Nickel	9.49	0.25	1		mg/kg
Beryllium	0.210	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.713	0.500	1		mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	12.4	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	9.69	0.25	1		mg/kg	Vanadium	33.8	0.2	1		mg/kg
Copper	19.4	0.5	1		mg/kg	Zinc	78.7	1.0	1		mg/kg
Lead	17.4	0.5	1		mg/kg						

RL - Reporting Limit DF - Dilution Factor Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-26-7	02-01-1011-34	01/24/02	Solid	01/24/02	01/25/02	020124lc10

Comment(s): Mercury was analyzed on 1/25/2002 11:31:29 AM with batch 020124lcs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0369	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	53.2	0.5	1		mg/kg	Nickel	4.11	0.25	1		mg/kg
Beryllium	0.138	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.0459	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	5.40	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	4.61	0.25	1		mg/kg	Vanadium	15.5	0.2	1		mg/kg
Copper	6.02	0.50	1		mg/kg	Zinc	26.7	1.0	1		mg/kg
Lead	4.69	0.50	1		mg/kg						

SB-25-0.5	02-01-1011-37	01/24/02	Solid	01/24/02	01/25/02	020124lc10
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Comment(s): Mercury was analyzed on 1/25/2002 11:34:31 AM with batch 020124lcs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0329	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	79.3	0.5	1		mg/kg	Nickel	17.9	0.2	1		mg/kg
Beryllium	0.224	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.269	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	45.6	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	13.3	0.2	1		mg/kg	Vanadium	64.6	0.2	1		mg/kg
Copper	15.0	0.5	1		mg/kg	Zinc	53.2	1.0	1		mg/kg
Lead	7.29	0.50	1		mg/kg						

SB-25-7	02-01-1011-38	01/24/02	Solid	01/24/02	01/25/02	020124lcs9
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Comment(s): Mercury was analyzed on 1/25/2002 11:43:38 AM with batch 020124lcs4

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0179	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	57.2	0.5	1		mg/kg	Nickel	4.78	0.25	1		mg/kg
Beryllium	0.145	0.250	1	J	mg/kg	Selenium	0.402	0.750	1	J	mg/kg
Cadmium	0.0628	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	6.92	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	5.20	0.25	1		mg/kg	Vanadium	17.6	0.2	1		mg/kg
Copper	6.45	0.50	1		mg/kg	Zinc	27.7	1.0	1		mg/kg
Lead	16.2	0.5	1		mg/kg						

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-24-0.5	02-01-1011-41	01/24/02	Solid	01/24/02	01/25/02	020124lcs9

Comment(s): Mercury was analyzed on 1/25/2002 11:46:39 AM with batch 020124lcs4

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0245	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.0516	0.250	1	J	mg/kg
Barium	83.4	0.5	1		mg/kg	Nickel	6.07	0.25	1		mg/kg
Beryllium	0.191	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.0868	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	7.87	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	6.29	0.25	1		mg/kg	Vanadium	21.2	0.2	1		mg/kg
Copper	8.66	0.50	1		mg/kg	Zinc	34.6	1.0	1		mg/kg
Lead	5.83	0.50	1		mg/kg						

SB-24-7	02-01-1011-42	01/24/02	Solid	01/24/02	01/25/02	020124lcs9
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Comment(s): Mercury was analyzed on 1/25/2002 11:49:42 AM with batch 020124lcs4

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0185	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.0857	0.250	1	J	mg/kg
Barium	78.5	0.5	1		mg/kg	Nickel	5.91	0.25	1		mg/kg
Beryllium	0.166	0.250	1	J	mg/kg	Selenium	0.229	0.750	1	J	mg/kg
Cadmium	0.347	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	6.95	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	5.98	0.25	1		mg/kg	Vanadium	19.5	0.2	1		mg/kg
Copper	8.28	0.50	1		mg/kg	Zinc	153	1	1		mg/kg
Lead	12.5	0.5	1		mg/kg						

Method Blank	099-04-007-1,290	N/A	Solid	01/24/02	01/24/02	020124lcs4
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Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0835	1		mg/kg

Method Blank	099-04-007-1,291	N/A	Solid	01/24/02	01/25/02	020124lcs6
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Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0835	1		mg/kg

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	097-01-002-3.071	N/A	Solid	01/24/02	01/25/02	0201241c10

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Arsenic	ND	0.750	1		mg/kg	Nickel	ND	0.250	1		mg/kg
Barium	ND	0.500	1		mg/kg	Selenium	ND	0.750	1		mg/kg
Beryllium	ND	0.250	1		mg/kg	Silver	ND	0.250	1		mg/kg
Cadmium	ND	0.500	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Chromium (Total)	ND	0.250	1		mg/kg	Vanadium	ND	0.250	1		mg/kg
Cobalt	ND	0.250	1		mg/kg	Zinc	ND	1.00	1		mg/kg
Copper	0.0474	0.500	1	J	mg/kg	Lead	ND	0.500	1		mg/kg

Method Blank	097-01-002-3.072	N/A	Solid	01/24/02	01/25/02	0201241cs9
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Arsenic	ND	0.750	1		mg/kg	Nickel	ND	0.250	1		mg/kg
Barium	ND	0.500	1		mg/kg	Selenium	ND	0.750	1		mg/kg
Beryllium	ND	0.250	1		mg/kg	Silver	ND	0.250	1		mg/kg
Cadmium	ND	0.500	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Chromium (Total)	ND	0.250	1		mg/kg	Vanadium	ND	0.250	1		mg/kg
Cobalt	ND	0.250	1		mg/kg	Zinc	ND	1.00	1		mg/kg
Copper	ND	0.500	1		mg/kg	Lead	ND	0.500	1		mg/kg



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8081A

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-3-2	02-01-1011-26	01/24/02	Solid	01/25/02	01/25/02	0201243

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Alpha-BHC	ND	5.0	1		ug/kg	Endrin	ND	5.0	1		ug/kg
Gamma-BHC	ND	5.0	1		ug/kg	Endrin Aldehyde	ND	5.0	1		ug/kg
Beta-BHC	ND	5.0	1		ug/kg	4,4'-DDD	ND	5.0	1		ug/kg
Heptachlor	ND	5.0	1		ug/kg	Endosulfan II	ND	5.0	1		ug/kg
Delta-BHC	ND	5.0	1		ug/kg	4,4'-DDT	ND	5.0	1		ug/kg
Aldrin	ND	5.0	1		ug/kg	Endosulfan Sulfate	ND	5.0	1		ug/kg
Heptachlor Epoxide	ND	5.0	1		ug/kg	Methoxychlor	ND	5.0	1		ug/kg
Endosulfan I	ND	5.0	1		ug/kg	Chlordane	ND	50	1		ug/kg
Dieldrin	ND	5.0	1		ug/kg	Toxaphene	ND	100	1		ug/kg
4,4'-DDE	ND	5.0	1		ug/kg	Endrin Ketone	ND	5.0	1		ug/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
Decachlorobiphenyl	70	50-130				2,4,5,6-Tetrachloro-m-Xylene	74	50-130			

SB-3-5	02-01-1011-27	01/24/02	Solid	01/25/02	01/25/02	0201243
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Alpha-BHC	ND	5.0	1		ug/kg	Endrin	ND	5.0	1		ug/kg
Gamma-BHC	ND	5.0	1		ug/kg	Endrin Aldehyde	ND	5.0	1		ug/kg
Beta-BHC	ND	5.0	1		ug/kg	4,4'-DDD	ND	5.0	1		ug/kg
Heptachlor	ND	5.0	1		ug/kg	Endosulfan II	ND	5.0	1		ug/kg
Delta-BHC	ND	5.0	1		ug/kg	4,4'-DDT	ND	5.0	1		ug/kg
Aldrin	ND	5.0	1		ug/kg	Endosulfan Sulfate	ND	5.0	1		ug/kg
Heptachlor Epoxide	ND	5.0	1		ug/kg	Methoxychlor	ND	5.0	1		ug/kg
Endosulfan I	ND	5.0	1		ug/kg	Chlordane	ND	50	1		ug/kg
Dieldrin	ND	5.0	1		ug/kg	Toxaphene	ND	100	1		ug/kg
4,4'-DDE	ND	5.0	1		ug/kg	Endrin Ketone	ND	5.0	1		ug/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
Decachlorobiphenyl	78	50-130				2,4,5,6-Tetrachloro-m-Xylene	78	50-130			

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8081A

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-07-011-17	N/A	Solid	01/24/02	01/24/02	0201243

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Alpha-BHC	ND	5.0	1		ug/kg	Endrin	ND	5.0	1		ug/kg
Gamma-BHC	ND	5.0	1		ug/kg	Endrin Aldehyde	ND	5.0	1		ug/kg
Beta-BHC	ND	5.0	1		ug/kg	4,4'-DDD	ND	5.0	1		ug/kg
Heptachlor	ND	5.0	1		ug/kg	Endosulfan II	ND	5.0	1		ug/kg
Delta-BHC	ND	5.0	1		ug/kg	4,4'-DDT	ND	5.0	1		ug/kg
Aldrin	ND	5.0	1		ug/kg	Endosulfan Sulfate	ND	5.0	1		ug/kg
Heptachlor Epoxide	ND	5.0	1		ug/kg	Methoxychlor	ND	5.0	1		ug/kg
Endosulfan I	ND	5.0	1		ug/kg	Chlordane	ND	50	1		ug/kg
Dieldrin	ND	5.0	1		ug/kg	Toxaphene	ND	100	1		ug/kg
4,4'-DDE	ND	5.0	1		ug/kg	Endrin Ketone	ND	5.0	1		ug/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
Decachlorobiphenyl	66	50-130				2,4,5,6-Tetrachloro-m-Xylene	75	50-130			

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8082

Project: 47127/LAUSD EAST VALLEY M.S.

Page 1 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-2-2	02-01-1011-23	01/24/02	Solid	01/25/02	01/25/02	0201243

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	50	1		ug/kg	Aroclor-1248	ND	50	1		ug/kg
Aroclor-1221	ND	50	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Aroclor-1232	ND	50	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
Aroclor-1242	ND	50	1		ug/kg	Aroclor-1262	ND	50	1		ug/kg
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	106	50-130				2,4,5,6-Tetrachloro-m-Xylene	94	50-130			

SB-2-3	02-01-1011-24	01/24/02	Solid	01/25/02	01/25/02	0201243
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	50	1		ug/kg	Aroclor-1248	ND	50	1		ug/kg
Aroclor-1221	ND	50	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Aroclor-1232	ND	50	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
Aroclor-1242	ND	50	1		ug/kg	Aroclor-1262	ND	50	1		ug/kg
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	110	50-130				2,4,5,6-Tetrachloro-m-Xylene	98	50-130			

SB-2-6	02-01-1011-25	01/24/02	Solid	01/25/02	01/25/02	0201243
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	50	1		ug/kg	Aroclor-1248	ND	50	1		ug/kg
Aroclor-1221	ND	50	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Aroclor-1232	ND	50	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
Aroclor-1242	ND	50	1		ug/kg	Aroclor-1262	ND	50	1		ug/kg
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	104	50-130				2,4,5,6-Tetrachloro-m-Xylene	94	50-130			

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8082

Project: 47127/LAUSD EAST VALLEY M.S.

Page 2 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-25-0.5	02-01-1011-37	01/24/02	Solid	01/25/02	01/25/02	0201243

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	50	1		ug/kg	Aroclor-1248	ND	50	1		ug/kg
Aroclor-1221	ND	50	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Aroclor-1232	ND	50	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
Aroclor-1242	ND	50	1		ug/kg	Aroclor-1262	ND	50	1		ug/kg
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	88	50-130				2,4,5,6-Tetrachloro-m-Xylene	82	50-130			

SB-25-7	02-01-1011-38	01/24/02	Solid	01/25/02	01/25/02	0201243
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	50	1		ug/kg	Aroclor-1248	ND	50	1		ug/kg
Aroclor-1221	ND	50	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Aroclor-1232	ND	50	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
Aroclor-1242	ND	50	1		ug/kg	Aroclor-1262	ND	50	1		ug/kg
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	94	50-130				2,4,5,6-Tetrachloro-m-Xylene	82	50-130			

Method Blank	098-07-009-23	N/A	Solid	01/24/02	01/25/02	0201243
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	50	1		ug/kg	Aroclor-1248	ND	50	1		ug/kg
Aroclor-1221	ND	50	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Aroclor-1232	ND	50	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
Aroclor-1242	ND	50	1		ug/kg	Aroclor-1262	ND	50	1		ug/kg
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	77	50-130				2,4,5,6-Tetrachloro-m-Xylene	69	50-130			



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8082

Project: 47127/LAUSD EAST VALLEY M.S.

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-9-0.5	02-01-1011-28	01/24/02	Solid	01/28/02	01/28/02	0201271

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	50	1		ug/kg	Aroclor-1248	ND	50	1		ug/kg
Aroclor-1221	ND	50	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Aroclor-1232	ND	50	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
Aroclor-1242	ND	50	1		ug/kg	Aroclor-1262	ND	50	1		ug/kg
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	82	50-130				2,4,5,6-Tetrachloro-m-Xylene	80	50-130			

SB-9-7	02-01-1011-29	01/24/02	Solid	01/28/02	01/28/02	0201271
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	50	1		ug/kg	Aroclor-1248	ND	50	1		ug/kg
Aroclor-1221	ND	50	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Aroclor-1232	ND	50	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
Aroclor-1242	ND	50	1		ug/kg	Aroclor-1262	ND	50	1		ug/kg
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	84	50-130				2,4,5,6-Tetrachloro-m-Xylene	81	50-130			

Method Blank	099-07-009-25	N/A	Solid	01/27/02	01/28/02	0201271
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	50	1		ug/kg	Aroclor-1248	ND	50	1		ug/kg
Aroclor-1221	ND	50	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Aroclor-1232	ND	50	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
Aroclor-1242	ND	50	1		ug/kg	Aroclor-1262	ND	50	1		ug/kg
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	76	50-130				2,4,5,6-Tetrachloro-m-Xylene	73	50-130			

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-12-0.5	02-01-1011-1	01/24/02	Solid	01/25/02	01/25/02	020101253

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzo(a)pyrene	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo(a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo(k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo(b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo(a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno(1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz(a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo(g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	82	31-142		Phenol-d6	84	30-136	
1,4-Dibromobenzene-d5	82	28-139		2-Fluorobiphenyl	79	33-144	
2,4,6-Tribromophenol	70	24-152		p-Terphenyl-d14	77	23-160	

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-12-7	02-01-1011-2	01/24/02	Solid	01/25/02	01/25/02	020101253

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzo(a) Pyrene	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	76	31-142		Phenol-d6	78	30-136	
Nitrobenzene-d5	78	28-139		2-Fluorobiphenyl	77	33-144	
2,4,6-Tribromophenol	64	24-152		p-Terphenyl-d14	75	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-18-0.5	02-01-1011-6	01/24/02	Solid	01/25/02	01/25/02	020101253

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	79	31-142		Phenol-d6	83	30-136	
Nitrobenzene-d5	85	28-139		2-Fluorobiphenyl	81	33-144	
2,4,6-Tribromophenol	70	24-152		p-Terphenyl-d14	79	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-18-7	02-01-1011-7	01/24/02	Solid	01/25/02	01/25/02	020101253

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	78	31-142		Phenol-d6	81	30-136	
Nitrobenzene-d5	80	28-139		2-Fluorobiphenyl	77	33-144	
2,4,6-Tribromophenol	67	24-152		p-Terphenyl-d14	77	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-17-0.6	02-01-1011-10	01/24/02	Solid	01/25/02	01/25/02	020101253

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	72	31-142		Phenol-d6	76	30-136	
Nitrobenzene-d5	75	28-139		2-Fluorobiphenyl	74	33-144	
2,4,6-Tribromophenol	62	24-152		p-Terphenyl-d14	73	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
S8-17-7	02-01-1011-11	01/24/02	Solid	01/25/02	01/25/02	020101253

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
3is(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	85	31-142		Phenol-d6	88	30-136	
Nitrobenzene-d5	88	28-139		2-Fluorobiphenyl	86	33-144	
2,4,6-Tribromophenol	77	24-152		p-Terphenyl-d14	88	23-160	

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-16-0.5	02-01-1011-14	01/24/02	Solid	01/25/02	01/25/02	020101253

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	80	31-142		Phenol-d6	83	30-136	
Nitrobenzene-d5	82	28-139		2-Fluorobiphenyl	82	33-144	
2,4,6-Tribromophenol	72	24-152		p-Terphenyl-d14	84	23-160	

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-18-7	02-01-1011-15	01/24/02	Solid	01/25/02	01/25/02	020101253

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	80	31-142		Phenol-d6	83	30-136	
Nitrobenzene-d5	82	28-139		2-Fluorobiphenyl	80	33-144	
2,4,6-Tribromophenol	69	24-152		p-Terphenyl-d14	80	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-15-0-5	02-01-1011-19	01/24/02	Solid	01/25/02	01/25/02	020101253

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	78	31-142		Phenol-d6	82	30-136	
Nitrobenzene-d5	82	28-139		2-Fluorobiphenyl	77	33-144	
2,4,6-Tribromophenol	67	24-152		p-Terphenyl-d14	79	23-160	

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-15-7	02-01-1011-20	01/24/02	Solid	01/25/02	01/25/02	020101253

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	78	31-142		Phenol-d6	81	30-136	
Nitrobenzene-d5	79	28-139		2-Fluorobiphenyl	78	33-144	
2,4,6-Tribromophenol	66	24-152		p-Terphenyl-d14	76	23-160	

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-2-2	02-01-1011-23	01/24/02	Solid	01/25/02	01/26/02	020101253

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	73	31-142		Phenol-d6	78	30-136	
litrobenzene-d5	75	28-139		2-Fluorobiphenyl	76	33-144	
2,4,6-Tribromophenol	66	24-152		p-Terphenyl-d14	79	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SS-2-3	02-01-1011-24	01/24/02	Solid	01/25/02	01/25/02	020101253

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	80	31-142		Phenol-d6	84	30-136	
Nitrobenzene-d5	84	28-139		2-Fluorobiphenyl	83	33-144	
2,4,6-Tribromophenol	72	24-152		p-Terphenyl-d14	84	23-160	

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-2-5	02-01-1011-25	01/24/02	Solid	01/25/02	01/25/02	020101253

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	73	31-142		Phenol-d6	77	30-136	
Nitrobenzene-d5	76	28-139		2-Fluorobiphenyl	73	33-144	
2,4,6-Tribromophenol	62	24-152		p-Terphenyl-d14	72	23-160	

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-3-2	02-01-1011-25	01/24/02	Solid	01/25/02	01/25/02	020101253

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
3is(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzdine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	79	31-142		Phenol-d6	82	30-136	
Nitrobenzene-d5	82	28-139		2-Fluorobiphenyl	79	33-144	
2,4,6-Tribromophenol	67	24-152		p-Terphenyl-d14	79	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
38-3-5	02-01-1011-27	01/24/02	Solid	01/25/02	01/25/02	020101253

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits	Qual			Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	85	31-142				Phenol-d6	88	30-136			
11trobenezene-d5	88	28-139				2-Fluorobiphenyl	85	33-144			
2,4,6-Tribromophenol	72	24-152				p-Terphenyl-d14	85	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-9-0.5	02-01-1011-28	01/24/02	Solid	01/25/02	01/26/02	020101253

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
3is(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	81	31-142		Phenol-d6	84	30-136	
Nitrobenzene-d5	81	28-139		2-Fluorobiphenyl	82	33-144	
2,4,6-Tribromophenol	68	24-152		p-Terphenyl-d14	80	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-9-7	02-01-1011-29	01/24/02	Solid	01/25/02	01/29/02	020101253

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	79	31-142		Phenol-d6	84	30-136	
Nitrobenzene-d5	83	28-139		2-Fluorobiphenyl	82	33-144	
2,4,6-Tribromophenol	88	24-152		p-Terphenyl-d14	79	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-26-0:5	02-01-1011-33	01/24/02	Solid	01/25/02	01/26/02	020101263

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits	Qual			Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	79	31-142				Phenol-d6	83	30-136			
Nitrobenzene-d5	84	28-139				2-Fluorobiphenyl	82	33-144			
2,4,6-Tribromophenol	69	24-152				p-Terphenyl-d14	82	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-26-7	02-01-1011-34	01/24/02	Solid	01/25/02	01/26/02	020101253

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	79	31-142		Phenol-d6	82	30-136	
litrobenzene-d5	81	28-139		2-Fluorobiphenyl	80	33-144	
2,4,6-Tribromophenol	66	24-152		p-Terphenyl-d14	79	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-25-0.5	02-01-1011-37	01/24/02	Solid	01/25/02	01/26/02	020101253

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Ben-zidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	79	31-142		Phenol-d6	84	30-136	
Nitrobenzene-d5	84	28-139		2-Fluorobiphenyl	84	33-144	
2,4,6-Tribromophenol	70	24-152		p-Terphenyl-d14	84	23-160	

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-25-7	02-01-1011-38	01/24/02	Solid	01/25/02	01/26/02	020101254

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Sis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzydine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	89	31-142		Phenol-d6	72	30-136	
Nitrobenzene-d5	72	28-139		2-Fluorobiphenyl	69	33-144	
2,4,6-Tribromophenol	58	24-152		p-Terphenyl-d14	69	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-24-0.5	02-01-1011-41	01/24/02	Solid	01/25/02	01/26/02	020101254

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	80	31-142		Phenol-d6	84	30-136	
Nitrobenzene-d5	84	28-139		2-Fluorobiphenyl	81	33-144	
2,4,6-Tribromophenol	70	24-152		p-Terphenyl-d14	82	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-24-7	02-01-1011-42	01/24/02	Solid	01/25/02	01/26/02	020101254

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
3is(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	75	31-142		Phenol-d6	80	30-136	
Nitrobenzene-d5	78	28-139		2-Fluorobiphenyl	78	33-144	
2,4,6-Tribromophenol	68	24-152		p-Terphenyl-d14	79	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	089-04-010-1,177	N/A	Solid	01/25/02	01/25/02	020101253

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	100	31-142		Phenol-d6	106	30-136	
11trobenezene-d5	100	28-139		2-Fluorobiphenyl	94	33-144	
2,4,6-Tribromophenol	92	24-152		p-Terphenyl-d14	97	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	098-04-010-1,178	N/A	Solid	01/25/02	01/26/02	020101254

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
3is(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	96	31-142		Phenol-d6	101	30-136	
litrobenzene-d5	100	28-139		2-Fluorobiphenyl	96	33-144	
2,4,6-Tribromophenol	84	24-152		p-Terphenyl-d14	99	23-160	

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3520B  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
EQUIP BLANK 1-24	02-01-1011-45	01/24/02	Aqueous	01/25/02	01/25/02	0201252

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>			<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		
2-Fluorophenol	68	15-138				Phenol-d6	48	17-141			
Nitrobenzene-d5	98	56-123				2-Fluorobiphenyl	94	45-120			
2,4,6-Tribromophenol	83	32-143				p-Terphenyl-d14	95	46-133			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3520B  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

Page 2 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	095-01-003-914	N/A	Aqueous	01/25/02	01/25/02	0201252

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>			<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>		
2-Fluorophenol	65	15-138				Phenol-d6	47	17-141			
Nitrobenzene-d5	91	56-123				2-Fluorobiphenyl	88	45-120			
2,4,6-Tribromophenol	80	32-143				p-Terphenyl-d14	92	46-133			

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers



**Quality Control - Spike/Spike Duplicate**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: Total Digestion  
Method: EPA 6010B

Project: 47127/LAUSD EAST VALLEY M.S.

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB-12-7	Solid	ICP 3300	01/24/02	01/25/02	012482ms10

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	84	81	50-115	4	0-20	
Arsenic	92	91	75-125	1	0-20	
Barium	101	100	75-125	0	0-20	
Beryllium	95	94	75-125	1	0-20	
Cadmium	96	96	75-125	1	0-20	
Chromium (Total)	97	96	75-125	2	0-20	
Cobalt	100	100	75-125	1	0-20	
Copper	99	99	75-125	0	0-20	
Lead	95	94	75-125	1	0-20	
Molybdenum	95	94	75-125	2	0-20	
Nickel	98	98	75-125	0	0-20	
Selenium	93	92	75-125	1	0-20	
Silver	95	95	75-125	0	0-20	
Thallium	92	92	75-125	1	0-20	
Vanadium	95	93	75-125	2	0-20	
Zinc	106	106	75-125	0	0-20	

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: Total Digestion  
Method: EPA 6010B

Project: 47127/LAUSD EAST VALLEY M.S.

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-002-3,071	Soild	ICP 3300	01/25/02	0201244	0201244c10

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Antimony	50.0	50.3	101	80-120	
Arsenic	50.0	44.7	89	80-120	
Barium	50.0	53.9	108	80-120	
Beryllium	50.0	50.2	100	80-120	
Cadmium	50.0	52.4	105	80-120	
Chromium (Total)	50.0	51.1	102	80-120	
Cobalt	50.0	54.8	110	80-120	
Copper	50.0	50.7	101	80-120	
Lead	50.0	50.1	100	80-120	
Molybdenum	50.0	50.0	100	80-120	
Nickel	50.0	53.1	106	80-120	
Selenium	50.0	48.4	97	80-120	
Silver	25.0	25.7	103	80-120	
Thallium	50.0	51.8	104	80-120	
Vanadium	50.0	49.6	99	80-120	
Zinc	50.0	51.9	104	80-120	

**Quality Control - Spike/Spike Duplicate**

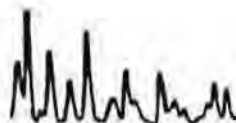
Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: Total Digestion  
Method: EPA 6010B

Project: 47127/LAUSD EAST VALLEY M.S.

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02-01-0988-25	Solid	ICP 3300	01/24/02	01/25/02	012402ms8

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	75	69	50-115	8	0-20	
Arsenic	85	87	75-125	2	0-20	
Barium	94	107	75-125	8	0-20	
Beryllium	87	89	75-125	2	0-20	
Cadmium	88	90	75-125	2	0-20	
Chromium (Total)	91	95	75-125	3	0-20	
Cobalt	93	95	75-125	2	0-20	
Copper	81	86	75-125	3	0-20	
Lead	87	85	75-125	2	0-20	
Molybdenum	87	88	75-125	2	0-20	
Nickel	90	92	75-125	3	0-20	
Selenium	85	88	75-125	3	0-20	
Silver	51	47	75-125	9	0-20	3
Thallium	87	89	75-125	2	0-20	
Vanadium	91	96	75-125	5	0-20	
Zinc	87	86	75-125	0	0-20	



**Quality Control - Laboratory Control Sample**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

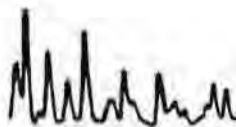
Date Received:  
Work Order No:  
Preparation:  
Method:

01/24/02  
02-01-1011  
Total Digestion  
EPA 6010B

Project: 47127/LAUSD EAST VALLEY M.S.

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-002-3,072	Soild	ICP 3300	01/25/02	020124-I	020124Ics9

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Antimony	50.0	50.7	101	80-120	
Arsenic	50.0	44.5	89	80-120	
Barium	50.0	53.6	107	80-120	
Beryllium	50.0	49.8	100	80-120	
Cadmium	50.0	52.0	104	80-120	
Chromium (Total)	50.0	50.8	102	80-120	
Cobalt	50.0	54.6	109	80-120	
Copper	50.0	50.6	101	80-120	
Lead	50.0	50.2	100	80-120	
Molybdenum	50.0	50.1	100	80-120	
Nickel	50.0	52.9	106	80-120	
Selenium	50.0	48.9	98	80-120	
Silver	25.0	25.6	102	80-120	
Thallium	50.0	51.8	104	80-120	
Vanadium	50.0	49.5	99	80-120	
Zinc	50.0	51.5	103	80-120	





**Quality Control - Spike/Spike Duplicate**

Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/24/02  
 Work Order No: 02-01-1011  
 Preparation: Total Digestion  
 Method: EPA 7471A

Project: 47127/LAUSD EAST VALLEY M.S.

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02-01-0975-7	Solid	Mercury	01/24/02	01/24/02	012402me4

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	116	114	75-136	1	0-16	



**Quality Control - Laboratory Control Sample**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: Total Digestion  
Method: EPA 7471A

Project: 47127/LAUSD EAST VALLEY M.S.

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number	
098-04-007-1,280	Solid	Mercury	01/24/02	020124-L	020124lca4	
Parameter	Conc Added		Conc Recovered	%Rec	%Rec CL	Qualifiers
Mercury	0.835		0.839	100	82-124	

**Quality Control - Spike/Spike Duplicate**

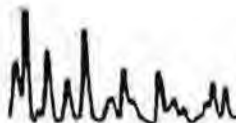
Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: Total Digestion  
Method: EPA 7471A

Project: 47127/LAUSD EAST VALLEY M.S.

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB-12-7	Solid	Mercury	01/24/02	01/25/02	012402ms8

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	102	101	76-136	1	0-16	



**Quality Control - Laboratory Control Sample**

Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/24/02  
 Work Order No: 02-01-1011  
 Preparation: Total Digestion  
 Method: EPA 7471A

Project: 47127/LAUSD EAST VALLEY M.S.

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-04-007-1,291	Solid	Mercury	01/25/02	0201241	0201241cs6

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Mercury	0.835	0.918	110	82-124	





**QUALITY ASSURANCE SUMMARY**

Method EPA 8081A (Solids)

Earth Tech  
Page 1 of 1

Work Order No.: 02-01-1011  
Date Analyzed: 01/24/02

**Surrogate Recoveries (in %)**

<u>Sample Number</u>	<u>S1</u>	<u>S2</u>
MS 020109654	62	61
MSD 020109654	60	64
LCS 0201243	68	75

Surrogate Compound

S1 > Decachlorobiphenyl  
S2 > 2,4,5,6-Tetrachloro-m-Xylene

Solid %REC  
Acceptable Limits

50 - 130  
50 - 130



**Quality Control - Spike/Spike Duplicate**

Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/24/02  
 Work Order No: 02-01-1011  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: 47127/LAUSD EAST VALLEY M.S.

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02-01-0965-4	Solid	GC 16	01/24/02	01/24/02	020109854

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gamma-BHC	90	89	50-135	1	0-25	
Heptachlor	90	86	50-135	4	0-25	
Endosulfan I	80	81	50-135	2	0-25	
Dieldrin	110	106	50-135	1	0-25	
Endrin	93	88	50-135	5	0-25	
4,4'-DDT	104	96	50-135	8	0-25	



**Quality Control - Laboratory Control Sample**

Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/24/02  
 Work Order No: 02-01-1011  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: 47127/LAUSD EAST VALLEY M.S.

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-07-011-17	Solid	GC 16	01/24/02	D10F0101	0201243

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Gamma-BHC	25	22	87	50-135	
Heptachlor	25	21	83	50-135	
Endosulfan I	25	20	80	50-135	
Dieldrin	25	20	82	50-135	
Endrin	25	23	91	50-135	
4,4'-DDT	25	21	84	50-135	



**QUALITY ASSURANCE SUMMARY**

Method EPA 8082 (Solids)

Earth Tech  
Page 1 of 1

Work Order No.: 02-01-1011  
Date Analyzed: 01/25/02

**Surrogate Recoveries (in %)**

<u>Sample Number</u>	<u>S1</u>	<u>S2</u>
LCS 0201271	82	76
LCSD 0201271	83	78

Surrogate Compound

S1 > Decachlorobiphenyl  
S2 > 2,4,5,6-Tetrachloro-m-Xylene

Solid %REC  
Acceptable Limits

50 - 130  
50 - 130





**Quality Control - LCS/LCS Duplicate**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8082

Project: 47127/LAUSD EAST VALLEY M.S.

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-009-25	Solid	GC 10	01/27/02	01/28/02	0201271

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aroclor-1260	78	78	50-135	0	0-25	

**QUALITY ASSURANCE SUMMARY**

Method EPA 8270C (Solids)

Earth Tech  
Page 1 of 1

Work Order No.: 02-01-1011  
Date Analyzed: 01/26/02

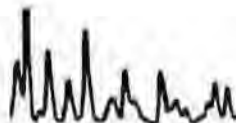
**Surrogate Recoveries (in %)**

<u>Sample Number</u>	<u>S1</u>	<u>S2</u>	<u>S3</u>	<u>S4</u>	<u>S5</u>	<u>S6</u>
MS 0201101125	84	87	86	83	75	82
MSD 0201101125	80	83	82	79	68	75
LCS 020101253	100	103	99	97	94	96
MS 0201101141	72	75	73	71	60	73
MSD 0201101141	74	83	85	80	65	79
LCS 020101254	98	101	101	97	90	98

Surrogate Compound

Solid %REC  
Acceptable Limits

S1 > 2-Fluorophenol	31 - 142
S2 > Phenol-d <sub>6</sub>	30 - 136
S3 > Nitrobenzene-d <sub>5</sub>	28 - 139
S4 > 2-Fluorobiphenyl	33 - 144
S5 > 2,4,6-Tribromophenol	24 - 152
S6 > p-Terphenyl-d14	23 - 160



**Quality Control - Spike/Spike Duplicate**

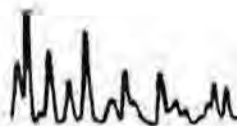
Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB-2-6	Solid	GC/MS F	01/25/02	01/26/02	0201101125

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	88	85	53-118	3	0-19	
2-Chlorophenol	85	83	60-119	3	0-18	
1,4-Dichlorobenzene	81	82	56-131	1	0-18	
N-Nitroso-di-n-propylamine	88	86	64-123	2	0-18	
1,2,4-Trichlorobenzene	77	75	52-144	2	0-17	
4-Chloro-3-Methylphenol	84	80	45-135	4	0-20	
Acenaphthene	89	87	45-152	2	0-18	
4-Nitrophenol	85	85	45-135	1	0-20	
2,4-Dinitrotoluene	90	89	42-128	2	0-23	
Pentachlorophenol	84	80	45-135	5	0-20	
Pyrene	87	81	45-135	6	0-20	



**Quality Control - Laboratory Control Sample**

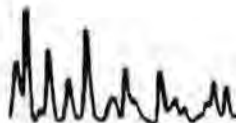
Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3545  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-04-010-1,177	Solid	GC/MS P	01/25/02	25JAN004	020101253

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Phenol	10	9.7	97	67-118	
2-Chlorophenol	10	9.6	96	72-119	
1,4-Dichlorobenzene	10	9.4	94	69-118	
N-Nitroso-di-n-propylamine	10	9.8	98	70-112	
1,2,4-Trichlorobenzene	10	8.5	85	65-135	
4-Chloro-3-Methylphenol	10	9.4	94	45-135	
Acenaphthene	10	9.9	99	61-142	
4-Nitrophenol	10	9.9	99	45-135	
2,4-Dinitrotoluene	10	10	104	47-137	
Pentachlorophenol	10	10	101	45-135	
Pyrene	10	9.2	92	45-135	





**Quality Control - Spike/Spike Duplicate**

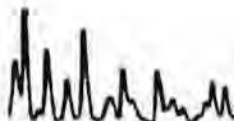
Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/24/02  
 Work Order No: 02-01-1011  
 Preparation: EPA 3545  
 Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB-24-0.5	Solid	GC/MS P	01/25/02	01/25/02	0201101141

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	74	85	53-118	13	0-19	
2-Chlorophenol	73	82	60-119	12	0-18	
1,4-Dichlorobenzene	72	80	56-131	10	0-18	
N-Nitroso-di-n-propylamine	77	87	64-123	12	0-18	
1,2,4-Trichlorobenzene	65	71	52-144	10	0-17	
4-Chloro-3-Methylphenol	70	78	45-135	11	0-20	
Acenaphthene	78	88	45-152	13	0-18	
4-Nitrophenol	72	85	45-135	16	0-20	
2,4-Dinitrotoluene	78	89	42-128	13	0-23	
Pentachlorophenol	69	78	45-135	13	0-20	
Pyrene	75	84	45-135	11	0-20	



**Quality Control - Laboratory Control Sample**

Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/24/02  
 Work Order No: 02-01-1011  
 Preparation: EPA 3545  
 Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
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099-04-010-1,178	Solid	GC/MS P	01/26/02	251AN032	020101254
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Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Phenol	10	9.6	96	67-118	
2-Chlorophenol	10	9.4	94	72-119	
1,4-Dichlorobenzene	10	9.3	93	69-118	
N-Nitroso-di-n-propylamine	10	9.8	98	70-112	
1,2,4-Trichlorobenzene	10	8.5	85	65-135	
4-Chloro-3-Methylphenol	10	9.5	95	45-135	
Acenaphthene	10	9.9	99	61-142	
4-Nitrophenol	10	9.9	99	45-135	
2,4-Dinitrotoluene	10	10	103	47-137	
Pentachlorophenol	10	9.3	93	45-135	
Pyrene	10	9.6	96	45-135	

**QUALITY ASSURANCE SUMMARY**  
Method EPA 8270C (Aqueous)

Earth Tech  
Page 1 of 1

Work Order No.: 02-01-1011  
Date Analyzed: 01/25/02

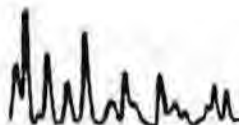
**Surrogate Recoveries (in %)**

<u>Sample Number</u>	<u>S1</u>	<u>S2</u>	<u>S3</u>	<u>S4</u>	<u>S5</u>	<u>S6</u>
LCS 0201252	74	59	97	94	84	96
LCSD 0201252	84	64	104	100	94	100

Surrogate Compound

Aqueous %REC  
Acceptable Limits

S1 > 2-Fluorophenol	15 - 138
S2 > Phenol-d <sub>6</sub>	17 - 141
S3 > Nitrobenzene-d <sub>5</sub>	56 - 123
S4 > 2-Fluorobiphenyl	45 - 120
S5 > 2,4,6-Tribromophenol	32 - 143
S6 > p-Terphenyl-d <sub>14</sub>	46 - 133



**Quality Control - LCS/LCS Duplicate**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/24/02  
Work Order No: 02-01-1011  
Preparation: EPA 3510B  
Method: EPA 8270C

Project: 47127/LAUSD EAST VALLEY M.S.

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-003-914	Aqueous	GC/MS P	01/25/02	01/25/02	0201252

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	61	67	12-151	10	0-23	
2-Chlorophenol	90	102	45-135	13	0-18	
1,4-Dichlorobenzene	89	98	36-118	9	0-26	
N-Nitroso-di-n-propylamine	99	108	52-128	9	0-13	
1,2,4-Trichlorobenzene	85	92	42-120	7	0-21	
4-Chloro-3-Methylphenol	97	104	20-150	6	0-40	
Acenaphthene	105	112	51-137	6	0-11	
4-Nitrophenol	64	73	20-150	12	0-40	
2,4-Dinitrotoluene	107	114	25-143	6	0-36	
Pentachlorophenol	97	111	20-150	14	0-40	
Pyrene	102	106	45-135	4	0-20	



## GLOSSARY OF TERMS AND QUALIFIERS

Work Order Number: 02-01-1011

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<u>Qualifier</u>	<u>Definition</u>
3	Spike or Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
J	Analyte was detected at a concentration below the reporting limit. Reported value is estimated.
ND	Not detected at indicated reporting limit.



February 11, 2002

Ms. Mary Carol Valenzuela  
Calscience  
7440 Lincoln Way  
Garden Grove, CA 92841

Re: 02-01-1011  
PTS File: 32034

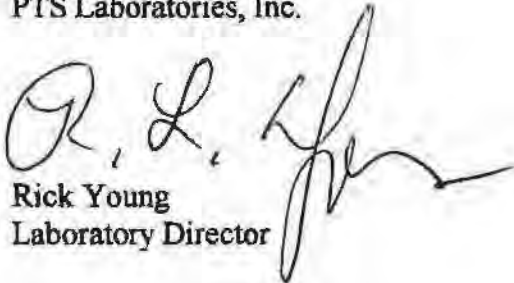
Dear Ms. Valenzuela:

Enclosed is final data for from your Project # 02-01-1011. All analyses were performed by applicable ASTM, EPA or API methodology. Samples will be retained for 30 days before disposal unless other arrangements are made.

We appreciate the opportunity to be of service and trust these data will prove beneficial in the development of this project. Please feel free to call myself or Larry Kunkel, District Manager, should you have any questions or require additional information.

Sincerely,

PTS Laboratories, Inc.



Rick Young  
Laboratory Director

RY/vk

encl.

**PHYSICAL PROPERTIES DATA**

(METHODOLOGY: ASTM D2216, API RP40, ASTM D5084, EPA 9060B)

PROJECT NAME: N/A

PROJECT NO: 02-01-1011

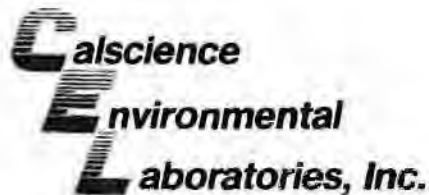
											25.0 PSI CONFINING STRESS	
SAMPLE ID.	DEPTH, ft.	SAMPLE ORIENT. (1)	MOISTURE CONTENT (% wt)	DENSITY		POROSITY, %Vb (2)		PORE FLUID SATURATIONS, % Pv (3)		TOTAL ORGANIC CARBON mg/kg	NATIVE STATE EFFECTIVE PERMEABILITY TO WATER (5) (millidarcy)	NATIVE STATE EFFECTIVE HYDRAULIC CONDUCTIVITY (5) (cm/s)
				BULK (g/cc)	GRAIN (g/cc)	EFFECTIVE	AIR FILLED	WATER	HYDROCARBON			
SB-12-Physical	N/A	V	5.3	1.50	2.68	43.9	35.6	18.9	ND<0.1	7300	336	3.15E-04
SB-16-Physical	N/A	V	6.0	1.49	2.69	44.6	35.3	21.0	ND<0.1	1400	32.6	3.04E-05
SB-9-Physical	N/A	V	7.1	1.38	2.69	48.7	38.3	21.3	ND<0.1	1800	28.2	2.66E-05

(1) Sample Orientation: H = horizontal; V = vertical (2) Effective Porosity = no pore fluids in place; all interconnected pore channels; Air Filled = pore channels not occupied by pore fluids  
 (3) Water = 0.9981 g/cc; Hydrocarbon = 0.7500 g/cc (4) Native State = As received with pore fluids in place (5) Permeability to water and conductivity measured at saturated conditions  
 V<sub>b</sub> = Bulk Volume, cc; P<sub>v</sub> = Pore Volume, cc; ND = Not Detected

32034

<b>LABORATORY CLIENT:</b> <b>CALSCIENCE ENVIRONMENTAL LABS, INC.</b> <b>ADDRESS:</b> <b>7440 Lincoln Way</b> <b>CITY:</b> <b>Garden Grove, CA 92841</b> <b>TEL:</b> 714-895-5494 <b>FAX:</b> 714-894-7501 <b>E-MAIL:</b>							<b>CLIENT PROJECT NAME / NUMBER:</b> <b>02-01-1011</b> <b>PROJECT CONTACT:</b> <b>Marycarol Valenzuela</b> <b>SAMPLER(S): (SIGNATURE)</b>										<b>P.O. NO.:</b>  <b>QUOTE NO.:</b>  <b>LAB USE ONLY</b> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div>			
<b>TURNAROUND TIME</b> <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input type="checkbox"/> 10 DAYS <b>SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)</b> <input type="checkbox"/> RWQCB REPORTING <input type="checkbox"/> ARCHIVE SAMPLES UNTIL / / <b>SPECIAL INSTRUCTIONS</b>  Normal TAT Laboratory Contact: Rick Young Please call with any questions. Thank You.							<b>REQUESTED ANALYSIS</b>													
<b>LAB USE ONLY</b>	<b>SAMPLE ID</b>	<b>LOCATION/ DESCRIPTION</b>	<b>SAMPLING</b>		<b>MAT- RIX</b>	<b>NO. OF CONT.</b>	<b>Bulk Density</b>	<b>Grain Density</b>	<b>Effective Porosity</b>	<b>Air Filled Porosity</b>	<b>Effective Permeability to water (ASTM D5084)</b>	<b>Effective Hydraulic Conductivity (ASTM D5084)</b>	<b>EPA 9060B- TOC</b>	<b>ASTM D2216 - Moisture Content</b>	<b>Pore Fluid Saturation - Water</b>	<b>Pore Fluid Saturation - Hydrocarbon</b>	<b>CONTAINER TYPE</b>			
	SB-12-Physical		1/24/2002		S	1	X	X	X	X	X	X	X	X	X	X	X			
	SB-16-Physical		1/24/2002		S	1	X	X	X	X	X	X	X	X	X	X	X			
	SB-9-Physical		1/24/2002		S	1	X	X	X	X	X	X	X	X	X	X	X			
Relinquished by: (Signature)							Received by: (Signature)							Date: 29 JAN 02		Time: 1330				
Relinquished by: (Signature)							Received by: (Signature)							Date:		Time:				
Relinquished by: (Signature)							Received by: (Signature)							Date:		Time:				





February 26, 2002  
PM09302

Steve Williams  
Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Subject: Calscience Work Order No.: 02-01-1088  
Client Reference: LAUSD East Valley M.S. /47127

Dear Mr. Williams:

Calscience Environmental Laboratories, Inc. (Calscience) is pleased to submit herewith the subject analytical report. The narrative presented below summarizes our analytical effort and clarifies any quality control anomalies which appear in the report.

#### **Sample Condition on Receipt**

Forty-nine soil samples and one water sample were received as part of this Work Order on January 25, 2002. All samples were transferred to the laboratory in ice-chests following strict chain-of-custody procedures. The temperature of the ice-chests were measured upon arrival in the laboratory and were within acceptable limit (4°C) and (4°C). The samples were logged into the Laboratory Information Management System (LIMS), given laboratory identification numbers, and stored in refrigeration units pending analysis.

#### **Data Summary**

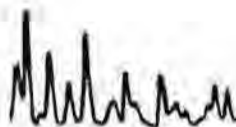
Data is presented on a wet weight basis.

#### Holding Times

All holding time requirements were met.

#### Calibration

Frequency and control criteria for initial and continuing calibration verifications were met.



### Blanks

The method blank data showed non-detectable levels for all constituents, with the exception of trace levels of arsenic and zinc for batches 020125lcs9 and 020125lc10.

### Matrix Spikes

Matrix spikes (MS) and matrix spike duplicates (MSD) were performed at required frequencies. All recoveries were within acceptable limits.

### Laboratory Control Samples


The Laboratory Control Sample (LCS) analysis was performed at the required frequency. All recoveries were within acceptable limits.

### Surrogates

Surrogate recoveries for all samples were within acceptable control limits.

If there are any questions regarding this report, please contact the undersigned at (714) 895-5494.

Sincerely,

  
CalScience Environmental  
Laboratories, Inc.  
Marycarol Valenzuela  
Project Manager

  
Michael J. Crisostomo  
Quality Assurance Manager

1088  
10f 3

Project Number 47127		Project Name/Client LAUSO EAST VALLEY M.S.		Custody Seal #		Earth Tech Cooler #									
Sample Custodian: (Signature) <i>LAURENCE BRADNE</i>				Analysis Required				Matrix							
Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	PID Reading (ppm)	Label Number	2015 (TPH)	2070 (SVOC)	2032 (PCBs)	2031 (Pesticides)	2010 (MET)	Sample Type	Sample Container	
1	SB-B-5	1/25/02	0940	X		0		X	X			X	Soil	Shutlows	
2	SB-B-5 DUP		0840					X							
3	SB-B-10		0845					X	X			X			
4	SB-B-10 DUP		0845					X							
5	SB-B-15		0855					X	X			X			
6	SB-22-0.5		1017						X			X			
7	SB-22-7		1023						X			X			
8	SB-22-10		1028					HOLD							
9	SB-21-0.5		1035						X	X	X	X			
10	SB-4-2		1104					X	X			X			
11	SB-4-5		1109					X	X			X			
12	SB-4-10		1117					X	X			X			
13	SB-4-15		1125					X	X			X			
14	SB-30-1		1146								X				
15	SB-30-3		1147								X				
16	SB-30-3 DUP		1147								X				
17	SB-30-5		1148								X				
18	SB-1-1		1206							X	X		X	X	
Relinquished by: (Signature) <i>[Signature]</i>		Date / Time 1/25/02		Received by: (Signature) <i>[Signature]</i>				Disposed of by: (Signature)				Items:		Date / Time	
Relinquished by: (Signature)		Date / Time 1/25/02 1735		Received by: (Signature) <i>[Signature]</i>				Disposed of by: (Signature)				Items:		Date / Time	
Send Lab Results To: STEVE WILLIAMS 100 W. BROADWAY STORZO LONG BEACH CA 90802 fax (562) 951-2086				Remarks: 24 HR TAT METALS 48 HR TAT Federal Express Airbill No. Lab:				Check Delivery Method: <input type="checkbox"/> Samples delivered in person <input type="checkbox"/> Common carrier				Laboratory Receiving Notes: Custody Seal Intact? Temp. of Shipping Container: Sample Condition:			

White Copy - Lab

Yellow Copy - File

Pink Copy - Client

10

Project Number 47127		Project Name/Client LAUSD EAST VALLEY N.S.		Analysis Required										Custody Seal #	Earth Tech Cooler #			
Sample Custodian: (Signature) LAWRENCE BROWN														Matrix				
Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	PID Reading (ppm)	Label Number	8015 (TRH)	8070 (SVOC)	8082 (PLA)	8081 (PEST)	6010 (MET)	pH			Sample Type	Sample Container	
1	SB-1-3	1/25/02	1210	X		0				X	X					X	X	
2	SB-1-3 DUP		1210							X								
3	SB-23-0.5		1232						X			X						
4	SB-23-7		1237						X			X						
5	SB-23-10		1244						HOLD									
6	SB-23-12		1255						HOLD									
7	SB-5-5		1313					X	X			X						
8	SB-5-10		1320					X	X			X						
9	SB-5-15		1332					X	X			X						
10	SB-22-2		1354									X	X					
11	SB-22-7		1422									X	X					
12	SB-27-2		1426						X									
13	SB-27-5		1429						X									
14	SB-27-10		1430	X		0			X							X	X	
15																		
16																		
17																		
18																		
Relinquished by: (Signature)		Date / Time 1/25/02		Received by: (Signature)				Disposed of by: (Signature)				Items:		Date / Time				
Relinquished by: (Signature)		Date / Time 1/25/02 173		Received by: (Signature)				Disposed of by: (Signature)				Items:		Date / Time				
Send Lab Results To: STEVE WILLIAMS 100 W. BROADWAY STE 240 LONG BEACH CA 90802 fax (562) 951-2086				Remarks: 24 HR TAT MUTALS 98HR TAT Federal Express Airbill No.: Lab:				Check Delivery Method: <input type="checkbox"/> Samples delivered in person <input type="checkbox"/> Common carrier				Laboratory Receiving Notes: Custody Seal Intact? Temp. of Shipping Container: Sample Condition:						

White Copy - Lab

Yellow Copy - File

Pink Copy - Client



1088

### Chain of Study Record

3 of 3

Project Number		Project Name/Client		Custody Seal #		Earth Tech Cooler #	
Sample Custodian: (Signature)		Sample Description (Field ID Number)		Date	Time	Grab	Comp.
Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	PID Reading (ppm)	Label Number
1	EQUIP BLANK 1/25	1/25/02	1230	X			
2	SB-32-5		0629			0	
3	SB-32-5 DUP		0629				
4	SB-32-10		0634				
5	SB-32-10 DUP		0634				
6	SB-32-15		0645				
7	SB-32-15 DUP		0645				
8	SB-33-5		0704				
9	SB-33-10		0709				
10	SB-33-15		0723				
11	SB-7-5		0742				
12	SB-7-5 DUP		0742				
13	SB-7-10		0750				
14	SB-7-10 DUP		0750				
15	SB-7-15		0820				
16	SB-7-15 DUP		0820				
17	SB-6-5		0813				
18	SB-6-9		0819	X		0	
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Disposed of by: (Signature)	
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Disposed of by: (Signature)	
Send Lab Results To:		Remarks:		Check Delivery Method:		Laboratory Receiving Notes:	

White Copy - Lab

**Yellow Copy - File**

Pink Copy - Client

**CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.**  
**Sample Summary Report**

**WORK ORDER #:**    **02-01-1088**

**QAPP:**        **0117**

#	Client Sample ID	Matrix	Date Collected	NoC	Comment
1	SB-8-5	S	01/25/2002	1	
2	SB-8-5 DUP	S	01/25/2002	1	
3	SB-8-10	S	01/25/2002	1	
4	SB-8-10 DUP	S	01/25/2002	1	
5	SB-8-15	S	01/25/2002	1	
6	SB-22-0.5	S	01/25/2002	1	
7	SB-22-7	S	01/25/2002	1	
8	SB-22-10	S	01/25/2002	1	
9	SB-21-0.5	S	01/25/2002	1	
10	SB-4-2	S	01/25/2002	1	
11	SB-4-5	S	01/25/2002	1	
12	SB-4-10	S	01/25/2002	1	
13	SB-4-15	S	01/25/2002	1	
14	SB-30-1	S	01/25/2002	1	
15	SB-30-3	S	01/25/2002	1	
16	SB-30-3 DUP	S	01/25/2002	1	
17	SB-30-5	S	01/25/2002	1	
18	SB-1-1	S	01/25/2002	1	
19	SB-1-3	S	01/25/2002	1	
20	SB-1-3 DUP	S	01/25/2002	1	
21	SB-23-0.5	S	01/25/2002	1	
22	SB-23-7	S	01/25/2002	1	
23	SB-23-10	S	01/25/2002	1	
24	SB-23-12	S	01/25/2002	1	
25	SB-5-5	S	01/25/2002	1	
26	SB-5-10	S	01/25/2002	1	
27	SB-5-15	S	01/25/2002	1	
28	SB-28-2	S	01/25/2002	1	
29	SB-28-7	S	01/25/2002	1	
30	SB-27-2	S	01/25/2002	1	
31	SB-27-5	S	01/25/2002	1	
32	SB-27-10	S	01/25/2002	1	
33	EQUIP BLANK 1/25	W	01/25/2002	1	
34	SB-32-5	S	01/25/2002	1	

**CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.**  
**Sample Summary Report**

**WORK ORDER #:** 02-01-1088

**QAPP: 0117**

#	Client Sample ID	Matrix	Date Collected	NoC	Comment
35	SB-32-5 DUP	S	01/25/2002	1	
36	SB-32-10	S	01/25/2002	1	
37	SB-32-10 DUP	S	01/25/2002	1	
38	SB-32-15	S	01/25/2002	1	
39	SB-32-15 DUP	S	01/25/2002	1	
40	SB-33-5	S	01/25/2002	1	
41	SB-33-10	S	01/25/2002	1	
42	SB-33-15	S	01/25/2002	1	
43	SB-7-5	S	01/25/2002	1	
44	SB-7-5 DUP	S	01/25/2002	1	
45	SB-7-10	S	01/25/2002	1	
46	SB-7-10 DUP	S	01/25/2002	1	
47	SB-7-15	S	01/25/2002	1	
48	SB-7-15 DUP	S	01/25/2002	1	
49	SB-6-5	S	01/25/2002	1	
50	SB-6-9	S	01/25/2002	1	

WORK ORDER #: **02-01-1088**

Cooler 1 of 2

## SAMPLE RECEIPT FORM

CLIENT: Earth Tech

DATE: 1/25/02

### TEMPERATURE – SAMPLES RECEIVED BY:

#### CALSCIENCE COURIER:

- ☐ Chilled, cooler with temperature blank provided.  
☐ Chilled, cooler without temperature blank.  
☐ Chilled and placed in cooler with wet ice.  
☐ Ambient and placed in cooler with wet ice.  
☐ Ambient temperature.  
☐ °C Temperature blank.

#### LABORATORY (Other than Calscience Courier):

- ☐ °C Temperature blank.  
☒ °C IR thermometer.  
☐ Ambient temperature.

Initial: RZ

### CUSTODY SEAL INTACT:

Sample(s): \_\_\_\_\_ Cooler: \_\_\_\_\_ No (Not Intact) : \_\_\_\_\_ Not Applicable (N/A): 1

Initial: RZ

### SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples.....	<u>/</u>		
Sample container label(s) consistent with custody papers.....	<u>/</u>		
Sample container(s) intact and good condition.....	<u>/</u>		
Correct containers for analyses requested.....	<u>/</u>		
Proper preservation noted on sample label(s).....			<u>/</u>
VOA vial(s) free of headspace. ....			<u>/</u>
Tedlar bag(s) free of condensation.....			<u>/</u>

Initial: RZ

### COMMENTS:

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WORK ORDER #: **02-01-1088**

Cooler 2 of 2

## SAMPLE RECEIPT FORM

CLIENT: Earth Tech

DATE: 1/25/02

### TEMPERATURE - SAMPLES RECEIVED BY:

#### CALSCIENCE COURIER:

- ☐ Chilled, cooler with temperature blank provided.  
☐ Chilled, cooler without temperature blank.  
☐ Chilled and placed in cooler with wet ice.  
☐ Ambient and placed in cooler with wet ice.  
☐ Ambient temperature.  
☐ °C Temperature blank.

#### LABORATORY (Other than Calscience Courier):

- ☐ °C Temperature blank.  
4 °C IR thermometer.  
☐ Ambient temperature.

Initial: ML

### CUSTODY SEAL INTACT:

Sample(s): \_\_\_\_\_ Cooler: \_\_\_\_\_ No (Not Intact) : \_\_\_\_\_ Not Applicable (N/A): /

Initial: ML

### SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples.....	<u>/</u>		
Sample container label(s) consistent with custody papers.....	<u>/</u>		
Sample container(s) intact and good condition.....	<u>/</u>		
Correct containers for analyses requested.....	<u>/</u>		
Proper preservation noted on sample label(s).....			<u>/</u>
VOA vial(s) free of headspace. ....			<u>/</u>
Tedlar bag(s) free of condensation.....			<u>/</u>

Initial: ML

### COMMENTS:

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**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: N/A  
Method: EPA 9045C

Project: LAUSD-East Valley M.S. / 47127

Page 1 of 1

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
SB-28-2	02-01-1088-28	Solid	01/25/02	01/25/02	01/25/02	0125PHDUP3

Parameter	Result	RL	DF	Qual	Units
pH	4.12	0.01	1		pH unit

SB-28-7	02-01-1088-29	Solid	01/25/02	01/25/02	01/25/02	0125PHDUP3
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Parameter	Result	RL	DF	Qual	Units
pH	5.84	0.01	1		pH unit

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

Page 1 of 13

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-8-5	02-01-1088-1	01/25/02	Solid	01/25/02	01/28/02	020125ics9

Comment(s): Mercury was analyzed on 1/28/02 10:40:59 AM with batch 020125ics6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.367	0.750	1	J	mg/kg	Mercury	0.0643	0.0835	1	J	mg/kg
Arsenic	0.608	0.750	1	J	mg/kg	Molybdenum	0.167	0.250	1	J	mg/kg
Barium	49.8	0.5	1		mg/kg	Nickel	4.45	0.25	1		mg/kg
Beryllium	0.145	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.202	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	5.65	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	4.00	0.25	1		mg/kg	Vanadium	13.5	0.2	1		mg/kg
Copper	7.60	0.50	1		mg/kg	Zinc	21.2	1.0	1		mg/kg
Lead	2.00	0.50	1		mg/kg						

SB-8-10	02-01-1088-3	01/25/02	Solid	01/25/02	01/28/02	020125ics9
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Comment(s): Mercury was analyzed on 1/28/02 10:43:58 AM with batch 020125ics6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.234	0.750	1	J	mg/kg	Mercury	0.0490	0.0835	1	J	mg/kg
Arsenic	1.75	0.75	1		mg/kg	Molybdenum	0.110	0.250	1	J	mg/kg
Barium	143	0.500	1		mg/kg	Nickel	14.3	0.2	1		mg/kg
Beryllium	0.583	0.250	1		mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.628	0.500	1		mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	20.1	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	11.1	0.2	1		mg/kg	Vanadium	38.0	0.2	1		mg/kg
Copper	21.0	0.5	1		mg/kg	Zinc	47.8	1.0	1		mg/kg
Lead	5.38	0.50	1		mg/kg						

SB-8-15	02-01-1088-5	01/25/02	Solid	01/25/02	01/28/02	020125ics9
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Comment(s): Mercury was analyzed on 1/28/02 10:47:00 AM with batch 020125ics6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.398	0.750	1	J	mg/kg	Mercury	0.0401	0.0835	1	J	mg/kg
Arsenic	0.695	0.750	1	J	mg/kg	Molybdenum	0.131	0.250	1	J	mg/kg
Barium	83.2	0.5	1		mg/kg	Nickel	7.84	0.25	1		mg/kg
Beryllium	0.247	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.340	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	10.7	0.2	1		mg/kg	Thallium	NO	0.750	1		mg/kg
Cobalt	7.42	0.25	1		mg/kg	Vanadium	21.9	0.2	1		mg/kg
Copper	9.18	0.50	1		mg/kg	Zinc	35.2	1.0	1		mg/kg
Lead	2.29	0.50	1		mg/kg						

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

Page 2 of 13

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-22-0.5	02-01-1088-6	01/25/02	Solid	01/25/02	01/28/02	020125lcs9

Comment(s): Mercury was analyzed on 1/28/02 10:50:00 AM with batch 020125lcs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.383	0.750	1	J	mg/kg	Mercury	0.0456	0.0835	1	J	mg/kg
Arsenic	0.728	0.750	1	J	mg/kg	Molybdenum	0.169	0.250	1	J	mg/kg
Barium	49.3	0.5	1		mg/kg	Nickel	4.55	0.25	1		mg/kg
Beryllium	0.144	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.209	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	5.87	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	4.40	0.25	1		mg/kg	Vanadium	13.5	0.2	1		mg/kg
Copper	5.59	0.50	1		mg/kg	Zinc	29.1	1.0	1		mg/kg
Lead	3.15	0.50	1		mg/kg						

SB-22-7	02-01-1088-7	01/25/02	Solid	01/25/02	01/28/02	020125lcs8
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Comment(s): Mercury was analyzed on 1/28/02 10:53:01 AM with batch 020125lcs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0416	0.0835	1	J	mg/kg
Arsenic	0.711	0.750	1	J	mg/kg	Molybdenum	0.0209	0.250	1	J	mg/kg
Barium	73.9	0.5	1		mg/kg	Nickel	6.11	0.25	1		mg/kg
Beryllium	0.211	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.342	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	8.62	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	6.39	0.25	1		mg/kg	Vanadium	21.1	0.2	1		mg/kg
Copper	7.94	0.50	1		mg/kg	Zinc	35.7	1.0	1		mg/kg
Lead	7.20	0.50	1		mg/kg						

SB-21-0.5	02-01-1088-9	01/25/02	Solid	01/25/02	01/28/02	020125lcs9
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Comment(s): Mercury was analyzed on 1/28/02 10:56:03 AM with batch 020125lcs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0130	0.0835	1	J	mg/kg
Arsenic	0.454	0.750	1	J	mg/kg	Molybdenum	0.0457	0.250	1	J	mg/kg
Barium	91.5	0.5	1		mg/kg	Nickel	8.40	0.25	1		mg/kg
Beryllium	0.284	0.250	1		mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.506	0.500	1		mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	11.8	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	8.02	0.25	1		mg/kg	Vanadium	26.8	0.2	1		mg/kg
Copper	10.9	0.5	1		mg/kg	Zinc	50.1	1.0	1		mg/kg
Lead	8.45	0.50	1		mg/kg						



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-4-2	02-01-1088-10	01/25/02	Solid	01/25/02	01/28/02	020125lcs9

Comment(s): Mercury was analyzed on 1/28/02 10:59:06 AM with batch 020125lcs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.433	0.750	1	J	mg/kg	Mercury	0.0159	0.0835	1	J	mg/kg
Arsenic	0.452	0.750	1	J	mg/kg	Molybdenum	0.0439	0.250	1	J	mg/kg
Barium	102	0.500	1		mg/kg	Nickel	8.45	0.25	1		mg/kg
Beryllium	0.280	0.250	1		mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.462	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	11.3	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	8.78	0.25	1		mg/kg	Vanadium	26.4	0.2	1		mg/kg
Copper	10.7	0.5	1		mg/kg	Zinc	45.6	1.0	1		mg/kg
Lead	3.01	0.50	1		mg/kg						

SB-4-5	02-01-1088-11	01/25/02	Solid	01/25/02	01/28/02	020125lcs9
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Comment(s): Mercury was analyzed on 1/28/02 11:02:08 AM with batch 020125lcs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0152	0.0835	1	J	mg/kg
Arsenic	0.943	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	45.1	0.5	1		mg/kg	Nickel	3.43	0.25	1		mg/kg
Beryllium	0.135	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.232	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	5.56	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	4.33	0.25	1		mg/kg	Vanadium	18.1	0.2	1		mg/kg
Copper	5.13	0.50	1		mg/kg	Zinc	23.3	1.0	1		mg/kg
Lead	1.40	0.50	1		mg/kg						

SB-4-10	02-01-1088-12	01/25/02	Solid	01/25/02	01/28/02	020125lcs9
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Comment(s): Mercury was analyzed on 1/28/02 11:05:11 AM with batch 020125lcs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0179	0.0835	1	J	mg/kg
Arsenic	0.305	0.750	1	J	mg/kg	Molybdenum	0.230	0.250	1	J	mg/kg
Barium	43.2	0.5	1		mg/kg	Nickel	5.87	0.25	1		mg/kg
Beryllium	0.140	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.227	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	8.25	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	4.99	0.25	1		mg/kg	Vanadium	17.6	0.2	1		mg/kg
Copper	4.98	0.50	1		mg/kg	Zinc	20.0	1.0	1		mg/kg
Lead	1.27	0.50	1		mg/kg						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-4-15	02-01-1088-13	01/25/02	Solid	01/25/02	01/28/02	0201251cs9

Comment(s): Mercury was analyzed on 1/28/02 11:08:15 AM with batch 0201251cs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	ND	0.0835	1		mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.280	0.250	1		mg/kg
Barium	43.6	0.5	1		mg/kg	Nickel	3.04	0.25	1		mg/kg
Beryllium	0.106	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.181	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	5.25	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	2.90	0.25	1		mg/kg	Vanadium	9.62	0.25	1		mg/kg
Copper	4.06	0.50	1		mg/kg	Zinc	19.6	1.0	1		mg/kg
Lead	0.998	0.500	1		mg/kg						

SB-23-0.5	02-01-1088-21	01/25/02	Solid	01/25/02	01/28/02	0201251cs9
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Comment(s): Mercury was analyzed on 1/28/02 11:18:00 AM with batch 0201251cs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.207	0.750	1	J	mg/kg	Mercury	0.0493	0.0835	1	J	mg/kg
Arsenic	0.797	0.750	1		mg/kg	Molybdenum	0.0716	0.250	1	J	mg/kg
Barium	69.8	0.5	1		mg/kg	Nickel	6.37	0.25	1		mg/kg
Beryllium	0.185	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.409	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	9.40	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	5.86	0.25	1		mg/kg	Vanadium	19.7	0.2	1		mg/kg
Copper	9.14	0.50	1		mg/kg	Zinc	43.4	1.0	1		mg/kg
Lead	17.0	0.5	1		mg/kg						

SB-23-7	02-01-1088-22	01/25/02	Solid	01/25/02	01/28/02	0201251cs9
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Comment(s): Mercury was analyzed on 1/28/02 11:21:05 AM with batch 0201251cs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.370	0.750	1	J	mg/kg	Mercury	0.0227	0.0835	1	J	mg/kg
Arsenic	0.476	0.750	1	J	mg/kg	Molybdenum	0.0409	0.250	1	J	mg/kg
Barium	65.6	0.5	1		mg/kg	Nickel	5.68	0.25	1		mg/kg
Beryllium	0.201	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.332	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	7.98	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	5.95	0.25	1		mg/kg	Vanadium	20.4	0.2	1		mg/kg
Copper	7.59	0.50	1		mg/kg	Zinc	29.8	1.0	1		mg/kg
Lead	3.34	0.50	1		mg/kg						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-5-5	02-01-1088-25	01/25/02	Solid	01/25/02	01/28/02	020125ics9

Comment(s): Mercury was analyzed on 1/28/02 11:24:10 AM with batch 020125ics6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.344	0.750	1	J	mg/kg	Mercury	0.0192	0.0835	1	J	mg/kg
Arsenic	0.802	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	97.2	0.5	1		mg/kg	Nickel	8.41	0.25	1		mg/kg
Beryllium	0.291	0.250	1		mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.450	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	12.2	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	7.94	0.25	1		mg/kg	Vanadium	26.9	0.2	1		mg/kg
Copper	10.7	0.5	1		mg/kg	Zinc	39.2	1.0	1		mg/kg
Lead	3.09	0.50	1		mg/kg						

SB-5-10	02-01-1088-26	01/25/02	Solid	01/25/02	01/28/02	020125ics9
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Comment(s): Mercury was analyzed on 1/28/02 11:27:16 AM with batch 020125ics6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0639	0.0835	1	J	mg/kg
Arsenic	0.444	0.750	1	J	mg/kg	Molybdenum	0.104	0.250	1	J	mg/kg
Barium	52.0	0.5	1		mg/kg	Nickel	4.05	0.25	1		mg/kg
Beryllium	0.119	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.172	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	5.93	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	3.71	0.25	1		mg/kg	Vanadium	11.2	0.2	1		mg/kg
Copper	4.19	0.50	1		mg/kg	Zinc	18.8	1.0	1		mg/kg
Lead	1.18	0.50	1		mg/kg						

SB-5-15	02-01-1088-27	01/25/02	Solid	01/25/02	01/28/02	020125ics9
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Comment(s): Mercury was analyzed on 1/28/02 11:30:22 AM with batch 020125ics7

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0517	0.0835	1	J	mg/kg
Arsenic	0.417	0.750	1	J	mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	62.0	0.5	1		mg/kg	Nickel	4.43	0.25	1		mg/kg
Beryllium	0.164	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.270	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	6.26	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	5.25	0.25	1		mg/kg	Vanadium	16.6	0.2	1		mg/kg
Copper	5.70	0.50	1		mg/kg	Zinc	26.4	1.0	1		mg/kg
Lead	1.40	0.50	1		mg/kg						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-28-2	02-01-1088-28	01/25/02	Solid	01/25/02	01/28/02	020125lcs9

Comment(s): Mercury was analyzed on 1/28/02 11:33:26 AM with batch 020125lcs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.499	0.750	1	J	mg/kg	Mercury	0.0469	0.0835	1	J	mg/kg
Arsenic	0.372	0.750	1	J	mg/kg	Molybdenum	1.58	0.25	1		mg/kg
Barium	85.6	0.5	1		mg/kg	Nickel	7.13	0.25	1		mg/kg
Beryllium	0.290	0.250	1		mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.810	0.500	1		mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	9.55	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	7.43	0.25	1		mg/kg	Vanadium	23.9	0.2	1		mg/kg
Copper	51.4	0.5	1		mg/kg	Zinc	47.9	1.0	1		mg/kg
Lead	8.50	0.50	1		mg/kg						

SB-28-7	02-01-1088-29	01/25/02	Solid	01/25/02	01/28/02	020125lcs9
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Comment(s): Mercury was analyzed on 1/28/02 11:36:25 AM with batch 020125lcs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.376	0.750	1	J	mg/kg	Mercury	0.0609	0.0835	1	J	mg/kg
Arsenic	0.317	0.750	1	J	mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	114	0.500	1		mg/kg	Nickel	16.1	0.2	1		mg/kg
Beryllium	0.414	0.250	1		mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	1.25	0.50	1		mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	14.1	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	11.0	0.2	1		mg/kg	Vanadium	32.7	0.2	1		mg/kg
Copper	15.5	0.5	1		mg/kg	Zinc	112	1	1		mg/kg
Lead	3.92	0.50	1		mg/kg						

SB-32-5	02-01-1088-34	01/25/02	Solid	01/25/02	01/28/02	020125lcs9
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Comment(s): Mercury was analyzed on 1/28/02 11:39:25 AM with batch 020125lcs6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	ND	0.0835	1		mg/kg
Arsenic	1.00	0.75	1		mg/kg	Molybdenum	0.0954	0.250	1	J	mg/kg
Barium	77.2	0.5	1		mg/kg	Nickel	5.34	0.25	1		mg/kg
Beryllium	0.182	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.285	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	7.38	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	5.44	0.25	1		mg/kg	Vanadium	16.7	0.2	1		mg/kg
Copper	7.33	0.50	1		mg/kg	Zinc	27.6	1.0	1		mg/kg
Lead	2.29	0.50	1		mg/kg						



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-32-5 DUP	02-01-1088-35	01/25/02	Solid	01/25/02	01/28/02	020125ics9

Comment(s): Mercury was analyzed on 1/28/02 11:42:24 AM with batch 020125ics6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0516	0.0835	1	J	mg/kg
Arsenic	1.03	0.75	1		mg/kg	Molybdenum	0.182	0.250	1	J	mg/kg
Barium	80.7	0.5	1		mg/kg	Nickel	7.34	0.25	1		mg/kg
Beryllium	0.224	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.375	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	9.18	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	6.68	0.25	1		mg/kg	Vanadium	21.2	0.2	1		mg/kg
Copper	8.39	0.50	1		mg/kg	Zinc	35.8	1.0	1		mg/kg
Lead	3.30	0.50	1		mg/kg						

SB-32-10	02-01-1088-36	01/25/02	Solid	01/25/02	01/28/02	020125ics9
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Comment(s): Mercury was analyzed on 1/28/02 11:45:24 AM with batch 020125ics6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0294	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.0501	0.250	1	J	mg/kg
Barium	142	0.500	1		mg/kg	Nickel	9.79	0.25	1		mg/kg
Beryllium	0.455	0.250	1		mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.649	0.500	1		mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	13.6	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	11.0	0.2	1		mg/kg	Vanadium	35.5	0.2	1		mg/kg
Copper	18.3	0.5	1		mg/kg	Zinc	56.0	1.0	1		mg/kg
Lead	4.01	0.50	1		mg/kg						

SB-32-10 DUP	02-01-1088-37	01/25/02	Solid	01/25/02	01/28/02	020125ics9
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Comment(s): Mercury was analyzed on 1/28/02 11:54:32 AM with batch 020125ics6

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0327	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	126	0.500	1		mg/kg	Nickel	10.0	0.2	1		mg/kg
Beryllium	0.407	0.250	1		mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.631	0.500	1		mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	13.8	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	10.6	0.2	1		mg/kg	Vanadium	33.3	0.2	1		mg/kg
Copper	16.2	0.5	1		mg/kg	Zinc	52.1	1.0	1		mg/kg
Lead	3.75	0.50	1		mg/kg						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-32-15	02-01-1088-38	01/25/02	Solid	01/25/02	01/28/02	0201251c10

Comment(s): Mercury was analyzed on 1/28/02 11:57:32 AM with batch 0201251cs7

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	ND	0.0835	1		mg/kg
Arsenic	0.325	0.750	1	J	mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	61.8	0.5	1		mg/kg	Nickel	3.88	0.25	1		mg/kg
Beryllium	0.156	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.199	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	4.91	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	4.46	0.25	1		mg/kg	Vanadium	12.7	0.2	1		mg/kg
Copper	4.68	0.50	1		mg/kg	Zinc	26.1	1.0	1		mg/kg
Lead	1.30	0.50	1		mg/kg						

SB-32-15 DUP	02-01-1088-39	01/25/02	Solid	01/25/02	01/28/02	0201251c10
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Comment(s): Mercury was analyzed on 1/28/02 12:00:34 PM with batch 0201251cs7

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.338	0.750	1	J	mg/kg	Mercury	ND	0.0835	1		mg/kg
Arsenic	0.804	0.750	1		mg/kg	Molybdenum	0.0465	0.250	1	J	mg/kg
Barium	63.1	0.5	1		mg/kg	Nickel	5.60	0.25	1		mg/kg
Beryllium	0.166	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.309	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	8.35	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	5.93	0.25	1		mg/kg	Vanadium	19.1	0.2	1		mg/kg
Copper	6.50	0.50	1		mg/kg	Zinc	28.4	1.0	1		mg/kg
Lead	2.18	0.50	1		mg/kg						

SB-33-5	02-01-1088-40	01/25/02	Solid	01/25/02	01/28/02	0201251c10
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Comment(s): Mercury was analyzed on 1/28/02 12:03:37 PM with batch 0201251cs7

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0289	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.116	0.250	1	J	mg/kg
Barium	134	0.500	1		mg/kg	Nickel	11.9	0.2	1		mg/kg
Beryllium	0.415	0.250	1		mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.941	0.500	1		mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	16.6	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	11.8	0.2	1		mg/kg	Vanadium	37.6	0.2	1		mg/kg
Copper	17.3	0.5	1		mg/kg	Zinc	55.5	1.0	1		mg/kg
Lead	3.94	0.50	1		mg/kg						

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	OC Batch ID
SB-33-10	02-01-1088-41	01/25/02	Solid	01/25/02	01/28/02	0201251c10

Comment(s): Mercury was analyzed on 1/28/02 12:06:40 PM with batch 0201251cs7

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	ND	0.0835	1		mg/kg
Arsenic	0.451	0.750	1	J	mg/kg	Molybdenum	0.0322	0.250	1	J	mg/kg
Barium	67.8	0.5	1		mg/kg	Nickel	4.84	0.25	1		mg/kg
Beryllium	0.131	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.364	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	6.63	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	5.21	0.25	1		mg/kg	Vanadium	16.2	0.2	1		mg/kg
Copper	5.50	0.50	1		mg/kg	Zinc	23.6	1.0	1		mg/kg
Lead	1.42	0.50	1		mg/kg						

SB-33-15	02-01-1088-42	01/25/02	Solid	01/25/02	01/28/02	0201251c10
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Comment(s): Mercury was analyzed on 1/28/02 12:09:43 PM with batch 0201251cs7

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0173	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	59.3	0.5	1		mg/kg	Nickel	4.26	0.25	1		mg/kg
Beryllium	0.123	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.343	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	6.08	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	4.73	0.25	1		mg/kg	Vanadium	15.3	0.2	1		mg/kg
Copper	4.96	0.50	1		mg/kg	Zinc	23.2	1.0	1		mg/kg
Lead	1.32	0.50	1		mg/kg						

SB-7-5	02-01-1088-43	01/25/02	Solid	01/25/02	01/28/02	0201251c10
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Comment(s): Mercury was analyzed on 1/28/02 12:12:46 PM with batch 0201251cs7

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0507	0.0835	1	J	mg/kg
Arsenic	0.244	0.750	1	J	mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	92.5	0.5	1		mg/kg	Nickel	6.71	0.25	1		mg/kg
Beryllium	0.197	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.508	0.500	1		mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	8.81	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	6.73	0.25	1		mg/kg	Vanadium	20.6	0.2	1		mg/kg
Copper	8.52	0.50	1		mg/kg	Zinc	35.9	1.0	1		mg/kg
Lead	7.91	0.50	1		mg/kg						



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-7-5 DUP	02-01-1088-44	01/25/02	Solid	01/25/02	01/28/02	0201251c10

Comment(s): Mercury was analyzed on 1/28/02 12:15:50 PM with batch 0201251cs7

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0185	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.333	0.250	1		mg/kg
Barium	96.9	0.5	1		mg/kg	Nickel	10.6	0.2	1		mg/kg
Beryllium	0.258	0.250	1		mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.652	0.500	1		mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	12.8	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	7.92	0.25	1		mg/kg	Vanadium	27.2	0.2	1		mg/kg
Copper	10.6	0.5	1		mg/kg	Zinc	41.2	1.0	1		mg/kg
Lead	3.90	0.50	1		mg/kg						

SB-7-10	02-01-1088-45	01/25/02	Solid	01/25/02	01/28/02	0201251c10
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Comment(s): Mercury was analyzed on 1/28/02 12:18:55 PM with batch 0201251cs7

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0319	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	48.1	0.5	1		mg/kg	Nickel	3.75	0.25	1		mg/kg
Beryllium	0.117	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.405	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	5.57	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	4.75	0.25	1		mg/kg	Vanadium	18.4	0.2	1		mg/kg
Copper	4.87	0.50	1		mg/kg	Zinc	25.1	1.0	1		mg/kg
Lead	4.20	0.50	1		mg/kg						

SB-7-10 DUP	02-01-1088-46	01/25/02	Solid	01/25/02	01/28/02	0201251c10
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Comment(s): Mercury was analyzed on 1/28/02 12:22:00 PM with batch 0201251cs7

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0341	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.0343	0.250	1	J	mg/kg
Barium	72.5	0.5	1		mg/kg	Nickel	6.22	0.25	1		mg/kg
Beryllium	0.186	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.479	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	8.68	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	6.38	0.25	1		mg/kg	Vanadium	20.6	0.2	1		mg/kg
Copper	8.05	0.50	1		mg/kg	Zinc	33.5	1.0	1		mg/kg
Lead	2.83	0.50	1		mg/kg						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-7-15	02-01-1088-47	01/25/02	Solid	01/25/02	01/28/02	020125lc10

Comment(s): Mercury was analyzed on 1/28/02 1:20:19 PM with batch 020125lcs7											
Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0237	0.0835	1	J	mg/kg
Arsenic	0.228	0.750	1	J	mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	58.5	0.5	1		mg/kg	Nickel	3.89	0.25	1		mg/kg
Beryllium	0.110	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.354	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	5.31	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	4.78	0.25	1		mg/kg	Vanadium	15.7	0.2	1		mg/kg
Copper	4.84	0.50	1		mg/kg	Zinc	22.4	1.0	1		mg/kg
Lead	1.16	0.50	1		mg/kg						

SB-7-15 DUP	02-01-1088-48	01/25/02	Solid	01/25/02	01/28/02	020125lc10
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Comment(s): Mercury was analyzed on 1/28/02 1:23:22 PM with batch 020125lcs7											
Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0184	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	54.2	0.5	1		mg/kg	Nickel	3.88	0.25	1		mg/kg
Beryllium	0.0809	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.298	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	5.33	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	4.52	0.25	1		mg/kg	Vanadium	13.7	0.2	1		mg/kg
Copper	5.32	0.50	1		mg/kg	Zinc	18.9	1.0	1		mg/kg
Lead	1.13	0.50	1		mg/kg						

SB-6-5	02-01-1088-49	01/25/02	Solid	01/25/02	01/28/02	020125lc10
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Comment(s): Mercury was analyzed on 1/28/02 1:26:21 PM with batch 020125lcs7											
Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0164	0.0835	1	J	mg/kg
Arsenic	0.254	0.750	1	J	mg/kg	Molybdenum	0.0634	0.250	1	J	mg/kg
Barium	95.4	0.5	1		mg/kg	Nickel	7.33	0.25	1		mg/kg
Beryllium	0.184	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.606	0.500	1		mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	10.0	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	7.48	0.25	1		mg/kg	Vanadium	23.8	0.2	1		mg/kg
Copper	9.39	0.50	1		mg/kg	Zinc	53.3	1.0	1		mg/kg
Lead	7.50	0.50	1		mg/kg						

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
S8-6-9	02-01-1088-50	01/25/02	Solid	01/25/02	01/28/02	020125ics10

Comment(s): Mercury was analyzed on 1/28/02 1:29:21 PM with batch 020125ics7

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0258	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.130	0.250	1	J	mg/kg
Barium	83.6	0.5	1		mg/kg	Nickel	5.98	0.25	1		mg/kg
Beryllium	0.141	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.613	0.500	1		mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	8.02	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	6.23	0.25	1		mg/kg	Vanadium	18.9	0.2	1		mg/kg
Copper	8.35	0.50	1		mg/kg	Zinc	202	1	1		mg/kg
Lead	26.7	0.5	1		mg/kg						

Method Blank	099-04-007-1,293	N/A	Solid	01/25/02	01/28/02	020125ics8
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Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0835	1		mg/kg

Method Blank	099-04-007-1,294	N/A	Solid	01/25/02	01/28/02	020125ics7
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Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0835	1		mg/kg

Method Blank	097-01-002-3,076	N/A	Solid	01/25/02	01/28/02	020125ics9
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Arsenic	ND	0.750	1		mg/kg	Nickel	ND	0.250	1		mg/kg
Barium	ND	0.500	1		mg/kg	Selenium	ND	0.750	1		mg/kg
Beryllium	ND	0.250	1		mg/kg	Silver	ND	0.250	1		mg/kg
Cadmium	ND	0.500	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Chromium (Total)	ND	0.250	1		mg/kg	Vanadium	ND	0.250	1		mg/kg
Cobalt	ND	0.250	1		mg/kg	Zinc	0.264	1.00	1	J	mg/kg
Copper	ND	0.500	1		mg/kg	Lead	ND	0.500	1		mg/kg

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	097-01-002-3,077	N/A	Solid	01/25/02	01/28/02	020125k10

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Arsenic	0.205	0.750	1	J	mg/kg	Nickel	ND	0.250	1		mg/kg
Barium	ND	0.500	1		mg/kg	Selenium	ND	0.750	1		mg/kg
Beryllium	ND	0.250	1		mg/kg	Silver	ND	0.250	1		mg/kg
Cadmium	ND	0.500	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Chromium (Total)	ND	0.250	1		mg/kg	Vanadium	ND	0.250	1		mg/kg
Cobalt	ND	0.250	1		mg/kg	Zinc	ND	1.00	1		mg/kg
Copper	ND	0.500	1		mg/kg	Lead	ND	0.500	1		mg/kg

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Ext. + D/I  
Method: TPH - Carbon Range

Project: LAUSD-East Valley M.S. / 47127

Page 1 of 9

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-8-5	02-01-1088-1	01/25/02	Solid	01/25/02	01/26/02	02012505sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual							
Decachlorobiphenyl	103	45-149									

7-6-5 DUP	02-01-1088-2	01/25/02	Solid	01/25/02	01/26/02	02012505sa
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual							
Decachlorobiphenyl	104	45-149									

SB-8-10	02-01-1088-3	01/25/02	Solid	01/25/02	01/26/02	02012505sa
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual							
Decachlorobiphenyl	93	45-149									

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Ext. + D/I  
Method: TPH - Carbon Range

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-8-10 DUP	02-01-1088-4	01/25/02	Solid	01/25/02	01/26/02	02012505sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg

Surrogates: REC (%) Control Limits Qual  
Decachlorobiphenyl 96 45-149

1-8-15	02-01-1088-5	01/25/02	Solid	01/25/02	01/26/02	02012505sa
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg

Surrogates: REC (%) Control Limits Qual  
Decachlorobiphenyl 92 45-149

SB-4-2	02-01-1088-10	01/25/02	Solid	01/25/02	01/26/02	02012505sa
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg

Surrogates: REC (%) Control Limits Qual  
Decachlorobiphenyl 98 45-149

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Ext. + D/I  
Method: TPH - Carbon Range

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-4-5	02-01-1088-11	01/25/02	Solid	01/25/02	01/26/02	02012505sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	NO		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual							
Decachlorobiphenyl	96	45-149									

3-4-10	02-01-1088-12	01/25/02	Solid	01/25/02	01/26/02	02012505sa
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual							
Decachlorobiphenyl	83	45-149									

SB-4-15	02-01-1088-13	01/25/02	Solid	01/25/02	01/26/02	02012505sa
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual							
Decachlorobiphenyl	90	45-149									

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Ext. + D/I  
Method: TPH - Carbon Range

Project: LAUSD-East Valley M.S. / 47127

Page 4 of 9

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-5-5	02-01-1088-25	01/25/02	Solid	01/25/02	01/26/02	02012505ea

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits	Qual								
Decachlorobiphenyl	74	45-149									

1-5-10	02-01-1088-28	01/25/02	Solid	01/25/02	01/26/02	02012505ea
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits	Qual								
Decachlorobiphenyl	64	45-149									

SB-5-15	02-01-1088-27	01/25/02	Solid	01/25/02	01/26/02	02012505ea
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits	Qual								
Decachlorobiphenyl	70	45-149									

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Ext. + D/I  
Method: TPH - Carbon Range

Project: LAUSD-East Valley M.S. / 47127

Page 5 of 9

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-32-5	02-01-1088-34	01/25/02	Solid	01/25/02	01/26/02	02012505sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual							
Decachlorobiphenyl	77	45-149									

1-32-10	02-01-1088-35	01/25/02	Solid	01/25/02	01/26/02	02012505sa
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual							
Decachlorobiphenyl	92	45-149									

SB-32-15	02-01-1088-38	01/25/02	Solid	01/25/02	01/26/02	02012505sa
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual							
Decachlorobiphenyl	58	45-149									

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Ext. + D/I  
Method: TPH - Carbon Range

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-33-5	02-01-1088-40	01/25/02	Solid	01/25/02	01/26/02	02012505sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits	Qual								
Decachlorobiphenyl	96	45-149									

SB-33-10	02-01-1088-41	01/25/02	Solid	01/25/02	01/26/02	02012505sa
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits	Qual								
Decachlorobiphenyl	98	45-149									

SB-33-15	02-01-1088-42	01/25/02	Solid	01/25/02	01/26/02	02012505sa
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits	Qual								
Decachlorobiphenyl	104	45-149									

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
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Preparation: Ext. + D/I  
Method: TPH - Carbon Range

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-7-5	02-01-1088-43	01/25/02	Solid	01/25/02	01/26/02	02012505sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual							
Decachlorobiphenyl	99	45-149									

1-7-10	02-01-1088-45	01/25/02	Solid	01/25/02	01/26/02	02012505sa
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual							
Decachlorobiphenyl	93	45-149									

SB-7-15	02-01-1088-47	01/25/02	Solid	01/25/02	01/27/02	02012506sa
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual							
Decachlorobiphenyl	86	45-149									

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Ext. + D/I  
Method: TPH - Carbon Range

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-6-S	02-01-1088-49	01/25/02	Solid	01/25/02	01/27/02	02012506sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	0.81		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	1.8		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	8.4		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	19		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	12		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	43	5	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual							
Decachlorobiphenyl	101	45-149									

SB-6-S	02-01-1088-50	01/25/02	Solid	01/25/02	01/27/02	02012506sa
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	2.7		1		mg/kg
C8	ND		1		mg/kg	C21-C22	11		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	24		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	100		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	150		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	84		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	370	5	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual							
Decachlorobiphenyl	89	45-149									

Method Blank	098-03-002-1,605	N/A	Solid	01/25/02	01/27/02	02012506sa
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Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	94	45-149			

Earth Tech  
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Preparation: Ext. + D/I  
Method: TPH - Carbon Range

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	098-03-002-1,606	N/A	Solid	01/25/02	01/27/02	02012506ss

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	100	45-149			



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8081A/8082

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-21-0.5	02-01-1088-9	01/25/02	Solid	01/27/02	01/28/02	0201271

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Alpha-BHC	ND	5.0	1		ug/kg	4,4'-DDT	19	5	1		ug/kg
Gamma-BHC	ND	5.0	1		ug/kg	Endosulfan Sulfate	ND	5.0	1		ug/kg
Beta-BHC	ND	5.0	1		ug/kg	Methoxychlor	ND	5.0	1		ug/kg
Heptachlor	ND	5.0	1		ug/kg	Chlordane	ND	50	1		ug/kg
Delta-BHC	ND	5.0	1		ug/kg	Toxaphene	ND	100	1		ug/kg
Aldrin	ND	5.0	1		ug/kg	Aroclor-1016	ND	50	1		ug/kg
Heptachlor Epoxide	ND	5.0	1		ug/kg	Aroclor-1221	ND	50	1		ug/kg
Endosulfan I	ND	5.0	1		ug/kg	Aroclor-1232	ND	50	1		ug/kg
Dieldrin	ND	5.0	1		ug/kg	Aroclor-1242	ND	50	1		ug/kg
4,4'-DDE	3.4	5.0	1	J	ug/kg	Aroclor-1248	ND	50	1		ug/kg
Endrin	ND	5.0	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Endrin Aldehyde	ND	5.0	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
4,4'-DDD	3.1	5.0	1	J	ug/kg	Aroclor-1262	ND	50	1		ug/kg
Endosulfan II	ND	5.0	1		ug/kg	Endrin Ketone	ND	5.0	1		ug/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
Decachlorobiphenyl	73	50-130				2,4,5,6-Tetrachloro-m-Xylene	64	50-130			

SB-1-1	02-01-1088-18	01/25/02	Solid	01/27/02	01/28/02	0201271
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Alpha-BHC	ND	5.0	1		ug/kg	4,4'-DDT	2.9	5.0	1	J	ug/kg
Gamma-BHC	ND	5.0	1		ug/kg	Endosulfan Sulfate	ND	5.0	1		ug/kg
Beta-BHC	ND	5.0	1		ug/kg	Methoxychlor	ND	5.0	1		ug/kg
Heptachlor	ND	5.0	1		ug/kg	Chlordane	ND	50	1		ug/kg
Delta-BHC	ND	5.0	1		ug/kg	Toxaphene	ND	100	1		ug/kg
Aldrin	ND	5.0	1		ug/kg	Aroclor-1016	ND	50	1		ug/kg
Heptachlor Epoxide	ND	5.0	1		ug/kg	Aroclor-1221	ND	50	1		ug/kg
Endosulfan I	ND	5.0	1		ug/kg	Aroclor-1232	ND	50	1		ug/kg
Dieldrin	ND	5.0	1		ug/kg	Aroclor-1242	ND	50	1		ug/kg
4,4'-DDE	2.1	5.0	1	J	ug/kg	Aroclor-1248	ND	50	1		ug/kg
Endrin	ND	5.0	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Endrin Aldehyde	ND	5.0	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
4,4'-DDD	ND	5.0	1		ug/kg	Aroclor-1262	ND	50	1		ug/kg
Endosulfan II	ND	5.0	1		ug/kg	Endrin Ketone	ND	5.0	1		ug/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
Decachlorobiphenyl	73	50-130				2,4,5,6-Tetrachloro-m-Xylene	72	50-130			

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8081A/8082

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-1-3	02-01-1088-19	01/25/02	Solid	01/27/02	01/28/02	0201271

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Alpha-BHC	ND	5.0	1		ug/kg	4,4'-DDT	ND	5.0	1		ug/kg
Gamma-BHC	ND	5.0	1		ug/kg	Endosulfan Sulfate	ND	5.0	1		ug/kg
Beta-BHC	ND	5.0	1		ug/kg	Methoxychlor	ND	5.0	1		ug/kg
Heptachlor	ND	5.0	1		ug/kg	Chlordane	ND	50	1		ug/kg
Delta-BHC	ND	5.0	1		ug/kg	Toxaphene	ND	100	1		ug/kg
Aldrin	ND	5.0	1		ug/kg	Aroclor-1016	ND	50	1		ug/kg
Heptachlor Epoxide	ND	5.0	1		ug/kg	Aroclor-1221	ND	50	1		ug/kg
Endosulfan I	ND	5.0	1		ug/kg	Aroclor-1232	ND	50	1		ug/kg
Dieldrin	ND	5.0	1		ug/kg	Aroclor-1242	ND	50	1		ug/kg
4,4'-DDE	ND	5.0	1		ug/kg	Aroclor-1248	ND	50	1		ug/kg
Endrin	ND	5.0	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Endrin Aldehyde	ND	5.0	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
4,4'-DDD	ND	5.0	1		ug/kg	Aroclor-1262	ND	50	1		ug/kg
Endosulfan II	ND	5.0	1		ug/kg	Endrin Ketone	ND	5.0	1		ug/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	69	50-130		2,4,5,6-Tetrachloro-m-Xylene	70	50-130	

Method Blank	095-01-014-2,369	N/A	Solid	01/27/02	01/28/02	0201271
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Alpha-BHC	ND	5.0	1		ug/kg	4,4'-DDT	ND	5.0	1		ug/kg
Gamma-BHC	ND	5.0	1		ug/kg	Endosulfan Sulfate	ND	5.0	1		ug/kg
Beta-BHC	ND	5.0	1		ug/kg	Methoxychlor	ND	5.0	1		ug/kg
Heptachlor	ND	5.0	1		ug/kg	Chlordane	ND	50	1		ug/kg
Delta-BHC	ND	5.0	1		ug/kg	Toxaphene	ND	100	1		ug/kg
Aldrin	ND	5.0	1		ug/kg	Aroclor-1016	ND	50	1		ug/kg
Heptachlor Epoxide	ND	5.0	1		ug/kg	Aroclor-1221	ND	50	1		ug/kg
Endosulfan I	ND	5.0	1		ug/kg	Aroclor-1232	ND	50	1		ug/kg
Dieldrin	ND	5.0	1		ug/kg	Aroclor-1242	ND	50	1		ug/kg
4,4'-DDE	ND	5.0	1		ug/kg	Aroclor-1248	ND	50	1		ug/kg
Endrin	ND	5.0	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Endrin Aldehyde	ND	5.0	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
4,4'-DDD	ND	5.0	1		ug/kg	Aroclor-1262	ND	50	1		ug/kg
Endosulfan II	ND	5.0	1		ug/kg	Endrin Ketone	ND	5.0	1		ug/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	65	50-130		2,4,5,6-Tetrachloro-m-Xylene	70	50-130	

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8081A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-30-1	02-01-1088-14	01/25/02	Solid	01/27/02	01/28/02	0201271

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Alpha-BHC	ND	5.0	1		ug/kg	Endrin	ND	5.0	1		ug/kg
Gamma-BHC	ND	5.0	1		ug/kg	Endrin Aldehyde	ND	5.0	1		ug/kg
Beta-BHC	ND	5.0	1		ug/kg	4,4'-DDD	ND	5.0	1		ug/kg
Heptachlor	ND	5.0	1		ug/kg	Endosulfan II	ND	5.0	1		ug/kg
Delta-BHC	ND	5.0	1		ug/kg	4,4'-DDT	3.6	5.0	1	J	ug/kg
Aldrin	ND	5.0	1		ug/kg	Endosulfan Sulfate	ND	5.0	1		ug/kg
Heptachlor Epoxide	ND	5.0	1		ug/kg	Methoxychlor	ND	5.0	1		ug/kg
Endosulfan I	ND	5.0	1		ug/kg	Chlordane	ND	50	1		ug/kg
Dieldrin	ND	5.0	1		ug/kg	Toxaphene	ND	100	1		ug/kg
4,4'-DDE	ND	5.0	1		ug/kg	Endrin Ketone	ND	5.0	1		ug/kg
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	71	50-130				2,4,5,6-Tetrachloro-m-Xylene	73	50-130			

SB-30-3	02-01-1088-15	01/25/02	Solid	01/27/02	01/28/02	0201271
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Alpha-BHC	ND	5.0	1		ug/kg	Endrin	ND	5.0	1		ug/kg
Gamma-BHC	ND	5.0	1		ug/kg	Endrin Aldehyde	ND	5.0	1		ug/kg
Beta-BHC	ND	5.0	1		ug/kg	4,4'-DDD	ND	5.0	1		ug/kg
Heptachlor	ND	5.0	1		ug/kg	Endosulfan II	ND	5.0	1		ug/kg
Delta-BHC	ND	5.0	1		ug/kg	4,4'-DDT	3.7	5.0	1	J	ug/kg
Aldrin	ND	5.0	1		ug/kg	Endosulfan Sulfate	ND	5.0	1		ug/kg
Heptachlor Epoxide	ND	5.0	1		ug/kg	Methoxychlor	ND	5.0	1		ug/kg
Endosulfan I	ND	5.0	1		ug/kg	Chlordane	ND	50	1		ug/kg
Dieldrin	ND	5.0	1		ug/kg	Toxaphene	ND	100	1		ug/kg
4,4'-DDE	ND	5.0	1		ug/kg	Endrin Ketone	ND	5.0	1		ug/kg
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	69	50-130				2,4,5,6-Tetrachloro-m-Xylene	72	50-130			

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8081A

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-30-3 DUP	02-01-1088-16	01/25/02	Solid	01/27/02	01/28/02	0201271

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Alpha-BHC	ND	5.0	1		ug/kg	Endrin	ND	5.0	1		ug/kg
Gamma-BHC	ND	5.0	1		ug/kg	Endrin Aldehyde	ND	5.0	1		ug/kg
Beta-BHC	ND	5.0	1		ug/kg	4,4'-DDD	ND	5.0	1		ug/kg
Heptachlor	ND	5.0	1		ug/kg	Endosulfan II	ND	5.0	1		ug/kg
Delta-BHC	ND	5.0	1		ug/kg	4,4'-DDT	ND	5.0	1		ug/kg
Aldrin	ND	5.0	1		ug/kg	Endosulfan Sulfate	ND	5.0	1		ug/kg
Heptachlor Epoxide	ND	5.0	1		ug/kg	Methoxychlor	ND	5.0	1		ug/kg
Endosulfan I	ND	5.0	1		ug/kg	Chlordane	ND	50	1		ug/kg
Dieldrin	ND	5.0	1		ug/kg	Toxaphene	ND	100	1		ug/kg
4,4'-DDE	ND	5.0	1		ug/kg	Endrin Ketone	ND	5.0	1		ug/kg
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	73	50-130				2,4,5,6-Tetrachloro-m-Xylene	74	50-130			

SB-30-5	02-01-1088-17	01/25/02	Solid	01/27/02	01/28/02	0201271
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Alpha-BHC	ND	5.0	1		ug/kg	Endrin	ND	5.0	1		ug/kg
Gamma-BHC	ND	5.0	1		ug/kg	Endrin Aldehyde	ND	5.0	1		ug/kg
Beta-BHC	ND	5.0	1		ug/kg	4,4'-DDD	ND	5.0	1		ug/kg
Heptachlor	ND	5.0	1		ug/kg	Endosulfan II	ND	5.0	1		ug/kg
Delta-BHC	ND	5.0	1		ug/kg	4,4'-DDT	ND	5.0	1		ug/kg
Aldrin	ND	5.0	1		ug/kg	Endosulfan Sulfate	ND	5.0	1		ug/kg
Heptachlor Epoxide	ND	5.0	1		ug/kg	Methoxychlor	ND	5.0	1		ug/kg
Endosulfan I	ND	5.0	1		ug/kg	Chlordane	ND	50	1		ug/kg
Dieldrin	ND	5.0	1		ug/kg	Toxaphene	ND	100	1		ug/kg
4,4'-DDE	ND	5.0	1		ug/kg	Endrin Ketone	ND	5.0	1		ug/kg
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	69	50-130				2,4,5,6-Tetrachloro-m-Xylene	73	50-130			



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8081A

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-07-011-19	N/A	Solid	01/27/02	01/28/02	0201271

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Alpha-BHC	ND	5.0	1		ug/kg	Endrin	ND	5.0	1		ug/kg
Gamma-BHC	ND	5.0	1		ug/kg	Endrin Aldehyde	ND	5.0	1		ug/kg
Beta-BHC	ND	5.0	1		ug/kg	4,4'-DDD	ND	5.0	1		ug/kg
Heptachlor	ND	5.0	1		ug/kg	Endosulfan II	ND	5.0	1		ug/kg
Delta-BHC	ND	5.0	1		ug/kg	4,4'-DDT	ND	5.0	1		ug/kg
Aldrin	ND	5.0	1		ug/kg	Endosulfan Sulfate	ND	5.0	1		ug/kg
Heptachlor Epoxide	ND	5.0	1		ug/kg	Methoxychlor	ND	5.0	1		ug/kg
Endosulfan I	ND	5.0	1		ug/kg	Chlordane	ND	50	1		ug/kg
Dieldrin	ND	5.0	1		ug/kg	Toxaphene	ND	100	1		ug/kg
4,4'-DDE	ND	5.0	1		ug/kg	Endrin Ketone	ND	5.0	1		ug/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
Decachlorobiphenyl	65	50-130				2,4,5,6-Tetrachloro-m-Xylene	70	50-130			

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8082

Project: LAUSD-East Valley M.S. / 47127

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-1-3 DUP	02-01-1088-20	01/25/02	Solid	01/27/02	01/28/02	0201271

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	50	1		ug/kg	Aroclor-1248	ND	50	1		ug/kg
Aroclor-1221	ND	50	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Aroclor-1232	ND	50	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
Aroclor-1242	ND	50	1		ug/kg	Aroclor-1262	ND	50	1		ug/kg
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	85	50-130				2,4,5,6-Tetrachloro-m-Xylene	82	50-130			

Method Blank	099-07-009-25	N/A	Solid	01/27/02	01/28/02	0201271
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	50	1		ug/kg	Aroclor-1248	ND	50	1		ug/kg
Aroclor-1221	ND	50	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Aroclor-1232	ND	50	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
Aroclor-1242	ND	50	1		ug/kg	Aroclor-1262	ND	50	1		ug/kg
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	76	50-130				2,4,5,6-Tetrachloro-m-Xylene	73	50-130			

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-8-5	02-01-1088-1	01/25/02	Solid	01/25/02	01/27/02	0201257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	73	31-142		Phenol-d6	83	30-136	
Nitrobenzene-d5	84	28-139		2-Fluorobiphenyl	80	33-144	
2,4,6-Tribromophenol	56	24-152		p-Terphenyl-d14	75	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-8-10	02-01-1088-3	01/25/02	Solid	01/25/02	01/27/02	0201257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	70	31-142		Phenol-d6	79	30-136	
Nitrobenzene-d5	84	28-139		2-Fluorobiphenyl	75	33-144	
2,4,6-Tribromophenol	54	24-152		p-Terphenyl-d14	76	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-8-15	02-01-1088-5	01/25/02	Solid	01/25/02	01/27/02	0201257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control</u>	<u>Qual</u>			<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control</u>	<u>Qual</u>		
		<u>Limits</u>						<u>Limits</u>			
2-Fluorophenol	79	31-142				Phenol-d6	89	30-136			
Nitrobenzene-d5	93	28-139				2-Fluorobiphenyl	95	33-144			
2,4,6-Tribromophenol	65	24-152				p-Terphenyl-d14	90	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-22-0.5	02-01-1088-6	01/25/02	Solid	01/25/02	01/27/02	0201257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
2,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>			<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>		
2-Fluorophenol	92	31-142				Phenol-d6	104	30-136			
Nitrobenzene-d5	109	28-139				2-Fluorobiphenyl	107	33-144			
2,4,6-Tribromophenol	75	24-152				p-Terphenyl-d14	101	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-22-T	02-01-1088-7	01/25/02	Solid	01/25/02	01/27/02	0201257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	88	31-142		Phenol-d6	98	30-136	
Nitrobenzene-d5	106	28-139		2-Fluorobiphenyl	108	33-144	
2,4,6-Tribromophenol	72	24-152		p-Terphenyl-d14	97	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-21-0.5	02-01-1084-9	01/25/02	Solid	01/25/02	01/28/02	0201257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	1.1	0.4	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	0.32	0.40	1	J	mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	9.5	0.4	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	8.5	0.4	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	8.2	0.4	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	8.1	0.4	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	7.5	0.4	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	7.4	0.4	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	7.5	0.3	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	2.6	0.4	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	0.82	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	2.2	0.4	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	79	31-142		Phenol-d6	90	30-136	
Nitrobenzene-d5	99	28-139		2-Fluorobiphenyl	104	33-144	
2,4,6-Tribromophenol	69	24-152		p-Terphenyl-d14	90	23-160	

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-4-2	02-01-1088-10	01/25/02	Solid	01/25/02	01/27/02	0201257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzo(a)anthracene	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo(a)anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo(k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo(b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo(a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno(1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz(a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo(g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	91	31-142		Phenol-d6	103	30-136	
Nitrobenzene-d5	106	28-139		2-Fluorobiphenyl	109	33-144	
2,4,6-Tribromophenol	76	24-152		p-Terphenyl-d14	101	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-4-5	02-01-1088-11	01/25/02	Solid	01/25/02	01/27/02	0201257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	86	31-142		Phenol-d6	95	30-136	
Nitrobenzene-d5	99	28-139		2-Fluorobiphenyl	102	33-144	
2,4,6-Tribromophenol	66	24-152		p-Terphenyl-d14	96	23-160	

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-4-10	02-01-1088-12	01/25/02	Solid	01/25/02	01/27/02	0201257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>			<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		
2-Fluorophenol	93	31-142				Phenol-d6	105	30-136			
Nitrobenzene-d5	113	28-139				2-Fluorobiphenyl	117	33-144			
2,4,6-Tribromophenol	75	24-152				p-Terphenyl-d14	114	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-4-15	02-01-1088-13	01/25/02	Solid	01/25/02	01/27/02	0201257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>			<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>		
2-Fluorophenol	87	31-142				Phenol-d6	98	30-136			
Nitrobenzene-d5	105	28-139				2-Fluorobiphenyl	106	33-144			
2,4,6-Tribromophenol	68	24-152				p-Terphenyl-d14	106	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-23-6.5	02-01-1088-21	01/25/02	Solid	01/25/02	01/28/02	0201257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Tris(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	77	31-142		Phenol-d6	92	30-136	
1,4-Dichlorobenzene-d5	99	28-139		2-Fluorobiphenyl	102	33-144	
2,4,6-Tribromophenol	71	24-152		p-Terphenyl-d14	96	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-23-7	02-01-1088-22	01/25/02	Solid	01/25/02	01/28/02	0201257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benazidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	82	31-142		Phenol-d6	94	30-136	
Nitrobenzene-d5	102	28-139		2-Fluorobiphenyl	104	33-144	
2,4,6-Tribromophenol	64	24-152		p-Terphenyl-d14	98	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-5-S	02-01-1088-25	01/25/02	Solid	01/25/02	01/28/02	0201257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	88	31-142		Phenol-d6	102	30-136	
Nitrobenzene-d5	107	28-139		2-Fluorobiphenyl	110	33-144	
2,4,6-Tribromophenol	70	24-152		p-Terphenyl-d14	104	23-160	

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-5-10	02-01-1088-26	01/25/02	Soils	01/25/02	01/28/02	0201257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
2,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	82	31-142		Phenol-d6	93	30-136	
1,3-Dibromobenzene-d5	101	28-139		2-Fluorobiphenyl	104	33-144	
2,4,6-Tribromophenol	63	24-152		p-Terphenyl-d14	98	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-5-15	02-01-1088-27	01/25/02	Solid	01/25/02	01/28/02	0201257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
p-4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzolc Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>			<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>		
2-Fluorophenol	80	31-142				Phenol-d6	93	30-136			
litrobenzene-d5	99	28-139				2-Fluorobiphenyl	103	33-144			
2,4,6-Tribromophenol	63	24-152				p-Terphenyl-d14	96	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-27-2	02-01-1088-30	01/25/02	Solid	01/25/02	01/28/02	0201257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzo(a) Pyrene	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo(a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo(k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo(b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo(a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno(1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz(a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo(g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	78	31-142		Phenol-d6	91	30-136	
Nitrobenzene-d5	96	28-139		2-Fluorobiphenyl	100	33-144	
2,4,6-Tribromophenol	62	24-152		p-Terphenyl-d14	94	23-160	

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-27-5	02-01-1088-31	01/25/02	Solid	01/25/02	01/28/02	0201257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzo(a) Pyrene	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits	Qual			Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	85	31-142				Phenol-d6	103	30-136			
1,4-Dichlorobenzene-d5	106	28-139				2-Fluorobiphenyl	105	33-144			
2,4,6-Tribromophenol	76	24-152				p-Terphenyl-d14	98	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-27-10	02-01-1088-32	01/25/02	Solid	01/25/02	01/28/02	0201257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	83	31-142		Phenol-d6	100	30-136	
Nitrobenzene-d5	104	28-139		2-Fluorobiphenyl	107	33-144	
2,4,6-Tribromophenol	77	24-152		p-Terphenyl-d14	101	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-32-5	02-01-1088-34	01/25/02	Solid	01/25/02	01/28/02	0201257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benazidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>			<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>		
2-Fluorophenol	78	31-142				Phenol-d6	93	30-136			
Nitrobenzene-d5	100	28-139				2-Fluorobiphenyl	98	33-144			
2,4,6-Tribromophenol	65	24-152				p-Terphenyl-d14	93	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-32-5 DUP	02-01-1088-35	01/25/02	Solid	01/25/02	01/28/02	0201257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
1,2-Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	80	31-142		Phenol-d6	96	30-136	
Nitrobenzene-d5	103	28-139		2-Fluorobiphenyl	103	33-144	
2,4,6-Tribromophenol	70	24-152		p-Terphenyl-d14	102	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SG-32-10	02-01-1088-36	01/25/02	Solid	01/25/02	01/26/02	020101254

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	75	31-142		Phenol-d6	91	30-136	
Nitrobenzene-d5	97	28-139		2-Fluorobiphenyl	93	33-144	
2,4,6-Tribromophenol	66	24-152		p-Terphenyl-d14	96	23-160	

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-32-10 DUP	02-01-1088-37	01/25/02	Solid	01/25/02	01/28/02	020101254

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Tris(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzo(a) Pyrene	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo(a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo(k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo(b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo(a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno(1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz(a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo(g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits	Qual			Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	96	31-142				Phenol-d6	99	30-136			
litrobenzene-d5	91	28-139				2-Fluorobiphenyl	93	33-144			
2,4,6-Tribromophenol	94	24-152				p-Terphenyl-d14	98	23-160			

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SE-32-15	02-01-1088-38	01/25/02	Solid	01/25/02	01/28/02	020101254

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>			<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>		
2-Fluorophenol	88	31-142				Phenol-d6	88	30-136			
1,4-Dibromobenzene-d5	84	28-139				2-Fluorobiphenyl	87	33-144			
2,4,6-Tribromophenol	76	24-152				p-Terphenyl-d14	92	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-32-15 DHP	02-01-1088-39	01/25/02	Solid	01/25/02	01/28/02	020101254

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzdine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	91	31-142		Phenol-d6	91	30-136	
litrobenzene-d5	85	28-139		2-Fluorobiphenyl	91	33-144	
2,4,6-Tribromophenol	84	24-152		p-Terphenyl-d14	94	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-33-5	02-01-1088-40	01/25/02	Solid	01/25/02	01/28/02	020101254

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
1,2-Dichloroisopropyl Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	78	31-142		Phenol-d6	81	30-136	
Nitrobenzene-d5	75	28-139		2-Fluorobiphenyl	76	33-144	
2,4,6-Tribromophenol	73	24-152		p-Terphenyl-d14	72	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-33-10	02-01-1088-41	01/25/02	Solid	01/25/02	01/26/02	020101254

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	87	31-142		Phenol-d6	90	30-136	
litrobenzene-d5	83	28-139		2-Fluorobiphenyl	90	33-144	
2,4,6-Tribromophenol	87	24-152		p-Terphenyl-d14	91	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-33-15	02-01-1088-42	01/25/02	Solid	01/25/02	01/28/02	020101254

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzo(a) Pyrene	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	94	31-142		Phenol-d6	96	30-136	
Nitrobenzene-d5	90	28-138		2-Fluorobiphenyl	94	33-144	
2,4,6-Tribromophenol	90	24-152		p-Terphenyl-d14	94	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-7-5	02-01-1088-43	01/25/02	Solid	01/25/02	01/28/02	020101254

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	91	31-142		Phenol-d6	94	30-136	
Nitrobenzene-d5	88	28-139		2-Fluorobiphenyl	91	33-144	
2,4,6-Tribromophenol	89	24-152		p-Terphenyl-d14	90	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-7-S DUP	02-01-1088-44	01/25/02	Solid	01/25/02	01/28/02	020101254

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	95	31-142		Phenol-d6	98	30-136	
1,3-Dibromobenzene-d5	91	28-139		2-Fluorobiphenyl	94	33-144	
2,4,6-Tribromophenol	93	24-152		p-Terphenyl-d14	94	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-7-10	02-01-1088-45	01/25/02	Solid	01/25/02	01/29/02	020101254

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	101	31-142		Phenol-d6	103	30-136	
11trobenezene-d5	95	28-139		2-Fluorobiphenyl	100	33-144	
2,4,6-Tribromophenol	99	24-152		p-Terphenyl-d14	100	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-7-10 DUP	02-01-1088-46	01/25/02	Solid	01/25/02	01/29/02	020101254

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>			<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>		
2-Fluorophenol	101	31-142				Phenol-d6	103	30-136			
Nitrobenzene-d5	95	28-139				2-Fluorobiphenyl	96	33-144			
2,4,6-Tribromophenol	99	24-152				p-Terphenyl-d14	101	23-160			

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-7-15	02-01-1088-47	01/25/02	Solid	01/25/02	01/29/02	020101254

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	89	31-142		Phenol-d6	94	30-136	
Nitrobenzene-d5	86	28-139		2-Fluorobiphenyl	90	33-144	
2,4,6-Tribromophenol	90	24-152		p-Terphenyl-d14	93	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-7-15 DUP	02-01-1088-48	01/25/02	Solid	01/25/02	01/29/02	020101254

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
9is(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	90	31-142		Phenol-d6	93	30-136	
Nitrobenzene-d5	87	28-139		2-Fluorobiphenyl	90	33-144	
2,4,6-Tribromophenol	87	24-152		p-Terphenyl-d14	92	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-6-5	02-01-1088-49	01/25/02	Solid	01/25/02	01/29/02	020101254

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>			<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>		
2-Fluorophenol	100	31-142				Phenol-d6	103	30-136			
Nitrobenzene-d5	94	28-139				2-Fluorobiphenyl	98	33-144			
2,4,6-Tribromophenol	99	24-152				p-Terphenyl-d14	97	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-6-9	02-01-1088-50	01/25/02	Solid	01/25/02	01/29/02	020101254

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
3/4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	96	31-142		Phenol-d6	99	30-136	
Nitrobenzene-d5	91	28-139		2-Fluorobiphenyl	94	33-144	
2,4,6-Tribromophenol	96	24-152		p-Terphenyl-d14	99	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-04-010-1,178	N/A	Solid	01/25/02	01/26/02	020101254

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Tris(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits	Qual			Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	96	31-142				Phenol-d6	101	30-136			
Nitrobenzene-d5	100	28-139				2-Fluorobiphenyl	96	33-144			
2,4,6-Tribromophenol	84	24-152				p-Terphenyl-d14	99	23-160			

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-04-010-1,180	N/A	Solid	01/25/02	01/27/02	0204257

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzydine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	80	31-142		Phenol-d6	89	30-136	
Nitrobenzene-d5	89	28-139		2-Fluorobiphenyl	82	33-144	
2,4,6-Tribromophenol	63	24-152		p-Terphenyl-d14	76	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-21-0.6	02-01-1088-9	01/26/02	Solid	02/14/02	02/14/02	0202142

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	0.42	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	0.13	0.40	1	J	mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	3.3	0.4	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	3.4	0.4	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	3.0	0.4	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	2.9	0.4	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	2.6	0.4	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	2.8	0.4	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	2.7	0.3	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	1.2	0.4	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	0.42	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	1.0	0.4	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
2-Fluorophenol	76	31-142				Phenol-d6	77	30-136			
Nitrobenzene-d5	79	28-139				2-Fluorobiphenyl	81	33-144			
2,4,6-Tribromophenol	74	24-152				p-Terphenyl-d14	77	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Page 2 of 3

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-21-0.5 (Homogenized)	02-01-1088-S1	01/25/02	Solid	02/14/02	02/14/02	0202142

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	1.6	0.4	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	0.54	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	14	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	14	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	13	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	13	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	11	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	12	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	12	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	4.7	0.4	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	1.6	0.4	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	4.2	0.4	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
2-Fluorophenol	78	31-142				Phenol-d6	82	30-136			
Nitrobenzene-d5	82	28-139				2-Fluorobiphenyl	83	33-144			
2,4,6-Tribromophenol	74	24-152				p-Terphenyl-d14	77	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-04-010-1,192	N/A	Solid	02/14/02	02/14/02	0202142

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,4-Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzdine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
2-Fluorophenol	96	31-142				Phenol-d6	99	30-136			
Nitrobenzene-d5	97	28-139				2-Fluorobiphenyl	97	33-144			
2,4,6-Tribromophenol	91	24-152				p-Terphenyl-d14	96	23-160			

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3510B  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
EQUIP BLANK 1/25	02-01-1088-33	01/25/02	Aqueous	01/25/02	01/28/02	0201252

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
1,4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>			<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>		
2-Fluorophenol	48	15-138				Phenol-d6	41	17-141			
Nitrobenzene-d5	85	56-123				2-Fluorobiphenyl	83	45-120			
1,4,6-Tribromophenol	57	32-143				p-Terphenyl-d14	77	46-133			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3510B  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	095-01-003-914	N/A	Aqueous	01/25/02	01/25/02	0201252

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
2,4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	65	15-138		Phenol-d6	47	17-141	
Nitrobenzene-d5	91	56-123		2-Fluorobiphenyl	88	45-120	
2,4,6-Tribromophenol	80	32-143		p-Terphenyl-d14	92	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**Quality Control - Duplicate**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 1/25/02  
Work Order No: 02-01-1088  
Preparation: N/A  
Method: EPA 9045C

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
SB-28-7	Solid	PH 4	01/25/02	01/25/02	0125PHDUP3

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
pH	5.84	5.85	0	0-25	



**Quality Control - Spike/Spike Duplicate**

Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/25/02  
 Work Order No: 02-01-1088  
 Preparation: Total Digestion  
 Method: EPA 6010B

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB-8-15	Solid	ICP 3300	01/25/02	01/28/02	012502ms8

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	55	51	50-115	7	0-20	
Arsenic	93	91	75-125	2	0-20	
Barium	104	107	75-125	1	0-20	
Beryllium	95	93	75-125	2	0-20	
Cadmium	97	95	75-125	2	0-20	
Chromium (Total)	96	95	75-125	2	0-20	
Cobalt	98	97	75-125	2	0-20	
Copper	101	100	75-125	1	0-20	
Lead	97	94	75-125	3	0-20	
Molybdenum	94	92	75-125	3	0-20	
Nickel	96	95	75-125	1	0-20	
Selenium	90	92	75-125	2	0-20	
Silver	99	98	75-125	1	0-20	
Thallium	87	85	75-125	3	0-20	
Vanadium	98	98	75-125	0	0-20	
Zinc	96	94	75-125	1	0-20	

**Quality Control - Laboratory Control Sample**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Total Digestion  
Method: EPA 6010B

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-002-3,076	Solid	ICP 3300	01/28/02	020125-J	020125ics9

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Antimony	50.0	51.5	103	80-120	
Arsenic	50.0	47.6	95	80-120	
Barium	50.0	55.0	110	80-120	
Beryllium	50.0	50.6	101	80-120	
Cadmium	50.0	53.2	106	80-120	
Chromium (Total)	50.0	51.7	103	80-120	
Cobalt	50.0	54.9	110	80-120	
Copper	50.0	50.6	101	80-120	
Lead	50.0	52.5	105	80-120	
Molybdenum	50.0	51.6	103	80-120	
Nickel	50.0	53.7	107	80-120	
Selenium	50.0	49.9	100	80-120	
Silver	25.0	24.5	98	80-120	
Thallium	50.0	51.9	104	80-120	
Vanadium	50.0	50.2	100	80-120	
Zinc	50.0	53.3	107	80-120	

**Quality Control - Spike/Spike Duplicate**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Total Digestion  
Method: EPA 6010B

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB-32-15	Solid	ICP 3300	01/25/02	01/28/02	012502ms10

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	73	75	50-115	3	0-20	
Arsenic	91	92	75-125	1	0-20	
Barium	108	101	75-125	3	0-20	
Beryllium	94	94	75-125	1	0-20	
Cadmium	97	97	75-125	0	0-20	
Chromium (Total)	96	97	75-125	1	0-20	
Cobalt	99	99	75-125	1	0-20	
Copper	98	100	75-125	2	0-20	
Lead	96	98	75-125	2	0-20	
Molybdenum	94	95	75-125	1	0-20	
Nickel	97	97	75-125	0	0-20	
Selenium	90	95	75-125	5	0-20	
Silver	94	95	75-125	1	0-20	
Thallium	88	90	75-125	2	0-20	
Vanadium	96	99	75-125	2	0-20	
Zinc	84	89	75-125	4	0-20	





**Quality Control - Laboratory Control Sample**

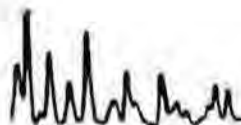
Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Total Digestion  
Method: EPA 6010B

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-002-3,077	Solid	ICP 3300	01/28/02	020125-1	020125ic10

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Antimony	50.0	50.9	102	80-120	
Arsenic	50.0	46.9	94	80-120	
Barium	50.0	54.4	109	80-120	
Beryllium	50.0	49.5	99	80-120	
Cadmium	50.0	52.7	105	80-120	
Chromium (Total)	50.0	51.2	102	80-120	
Cobalt	50.0	54.4	109	80-120	
Copper	50.0	50.1	100	80-120	
Lead	50.0	51.8	104	80-120	
Molybdenum	50.0	50.8	102	80-120	
Nickel	50.0	53.3	107	80-120	
Selenium	50.0	49.4	99	80-120	
Silver	25.0	24.3	97	80-120	
Thallium	50.0	51.4	103	80-120	
Vanadium	50.0	49.7	99	80-120	
Zinc	50.0	53.7	107	80-120	



**Quality Control - Spike/Spike Duplicate**

Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/25/02  
 Work Order No: 02-01-1088  
 Preparation: Total Digestion  
 Method: EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB-23-7	Solid	Mercury	01/25/02	01/28/02	012502ms5

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	84	84	76-136	0	0-16	

**Quality Control - Laboratory Control Sample**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Total Digestion  
Method: EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number	
099-04-007-1,293	Solid	Mercury	01/28/02	0201251	0201251cs6	
<u>Parameter</u>		<u>Conc Added</u>	<u>Conc Recovered</u>	<u>%Rec</u>	<u>%Rec CL</u>	<u>Qualifiers</u>
Mercury		0.835	0.873	105	82-124	



**Quality Control - Spike/Spike Duplicate**

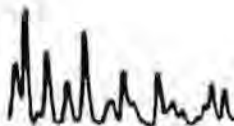
Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Total Digestion  
Method: EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB-5-15	Solid	Mercury	01/25/02	01/28/02	012502ms7

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	127	127	76-136	0	0-16	





**Quality Control - Laboratory Control Sample**

Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/25/02  
 Work Order No: 02-01-1088  
 Preparation: Total Digestion  
 Method: EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-04-007-1,294	Solid	Mercury	01/25/02	020125 I	020125ics7

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Mercury	0.835	0.873	105	82-124	



**QUALITY ASSURANCE SUMMARY**  
Method EPA 8015M - Carbon Chain (Solids)

Earth Tech  
Page 1 of 1

Work Order No.: 02-01-1088  
Date Analyzed: 01/27/02

**Surrogate Recoveries (in %)**

<u>Sample Number</u>	<u>S1</u>
MS SB-8-5 DUP	99
MSD SB-8-5 DUP	100
LCS 02012505sa	101
MS SB-7-15	103
MSD SB-7-15	113
LCS 02012506sa	110

Surrogate Compound

S1 > Decachlorobiphenyl

Solid %REC  
Acceptable Limits

45 - 149



**Quality Control - Spike/Spike Duplicate**

Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/25/02  
 Work Order No: 02-01-1088  
 Preparation: Ext. + D/I  
 Method: TPH - Carbon Range

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB-8-S DUP	Solid	GC 15	01/25/02	01/27/02	02012505ms

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	93	96	49-139	3	0-28	



**Quality Control - Laboratory Control Sample**

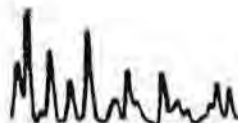
Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/25/02  
 Work Order No: 02-01-1088  
 Preparation: Ext. + D/I  
 Method: TPH - Carbon Range

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
098-03-002-1,605	Solid	GC 15	01/27/02	079F0101	02012505sa

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
TPH as Diesel	400	390	97	65-124	





**Quality Control - Spike/Spike Duplicate**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Ext. + D/I  
Method: TPH - Carbon Range

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB-7-15	Solid	GC 15	01/25/02	01/27/02	02012506ms

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	96	106	49-139	10	0-28	



**Quality Control - Laboratory Control Sample**

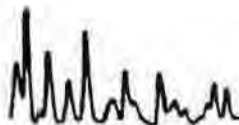
Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: Ext. + D/I  
Method: TPH - Carbon Range

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
088-03-002-1,606	Solid	GC 15	01/27/02	087F0101	020125066a

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
TPH as Diesel	400	380	95	65-124	



**QUALITY ASSURANCE SUMMARY**

Method EPA 8081A (Solids)

Earth Tech  
Page 1 of 1

Work Order No.: 02-01-1088  
Date Analyzed: 01/28/02

**Surrogate Recoveries (in %)**

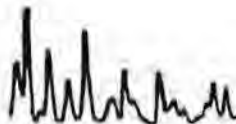
<u>Sample Number</u>	<u>S1</u>	<u>S2</u>
MS 0201108819	66	66
MSD 020110889	66	66
LCS 0201271	67	71

Surrogate Compound

S1 > Decachlorobiphenyl  
S2 > 2,4,5,6-Tetrachloro-m-Xylene

Solid %REC  
Acceptable Limits

50 - 130  
50 - 130



**Quality Control - Spike/Spike Duplicate**

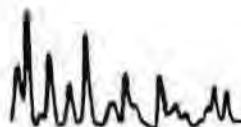
Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/25/02  
 Work Order No: 02-01-1088  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB-13	Solid	GC 16	01/27/02	01/28/02	0201108818

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gamma-BHC	76	81	50-135	6	0-25	
Heptachlor	78	81	50-135	4	0-25	
Endosulfan I	72	77	50-135	6	0-25	
Dieldrin	74	79	50-135	7	0-25	
Endrin	82	87	50-135	6	0-25	
4,4'-DDT	84	88	50-135	4	0-25	





**Quality Control - Laboratory Control Sample**

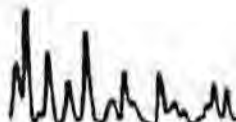
Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/25/02  
 Work Order No: 02-01-1088  
 Preparation: EPA 3545  
 Method: EPA 8081A

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-07-011-19	Solid	GC 16	01/28/02	D06F0101	0201271

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Gamma-BHC	25	22	89	50-135	
Heptachlor	25	22	88	50-135	
Endosulfan I	25	22	86	50-135	
Dieldrin	25	22	88	50-135	
Endrin	25	22	89	50-135	
4,4'-DDT	25	24	94	50-135	



**QUALITY ASSURANCE SUMMARY**

Method EPA 8082 (Solids)

Earth Tech  
Page 1 of 1

Work Order No.: 02-01-1088  
Date Analyzed: 01/28/02

**Surrogate Recoveries (in %)**

<u>Sample Number</u>	<u>S1</u>	<u>S2</u>
LCS 0201271	85	80
LCSD 0201271	87	82

Surrogate Compound

S1 > Decachlorobiphenyl  
S2 > 2,4,5,6-Tetrachloro-m-Xylene

Solid %REC  
Acceptable Limits

50 - 130  
50 - 130



**Quality Control - LCS/LCS Duplicate**

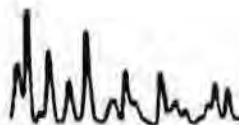
Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8082

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-009-25	Solid	GC 10	01/27/02	01/28/02	0201271

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aroclor-1260	78	78	50-135	0	0-25	



**QUALITY ASSURANCE SUMMARY**

Method EPA 8270C (Solids)

Earth Tech  
Page 1 of 1

Work Order No.: 02-01-1088  
Date Analyzed: 01/25-27/02

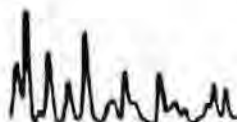
**Surrogate Recoveries (in %)**

<u>Sample Number</u>	<u>S1</u>	<u>S2</u>	<u>S3</u>	<u>S4</u>	<u>S5</u>	<u>S6</u>
MS 0201101141	72	75	73	71	60	73
MSD 0201101141	74	83	85	80	65	79
LCS 020101254	98	101	101	97	90	98
MS 0201108813	93	104	110	107	83	101
MSD 0201108813	93	105	111	111	84	105
LCS 020101257	85	93	97	89	70	82
MS 020205736	98	100	99	101	94	95
MSD 020205736	98	101	98	102	97	97
LCS 0202142	97	98	97	98	95	96

Surrogate Compound

Solid %REC  
Acceptable Limits

S1 > 2-Fluorophenol	31 - 142
S2 > Phenol-d <sub>6</sub>	30 - 136
S3 > Nitrobenzene-d <sub>5</sub>	28 - 139
S4 > 2-Fluorobiphenyl	33 - 144
S5 > 2,4,6-Tribromophenol	24 - 152
S6 > p-Terphenyl-d14	23 - 160





**Quality Control - Spike/Spike Duplicate**

Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/25/02  
 Work Order No: 02-01-1088  
 Preparation: EPA 3545  
 Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02-01-1011-41	Solid	GC/MS P	01/25/02	01/26/02	0201101141

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	74	85	53-118	13	0-19	
2-Chlorophenol	73	82	60-119	12	0-18	
1,4-Dichlorobenzene	72	80	56-131	10	0-18	
N-Nitroso-di-n-propylamine	77	87	64-123	12	0-18	
1,2,4-Trichlorobenzene	65	71	52-144	10	0-17	
4-Chloro-3-Methylphenol	70	76	45-135	11	0-20	
Acenaphthene	78	88	45-152	13	0-18	
4-Nitrophenol	72	85	45-135	16	0-20	
2,4-Dinitrotoluene	78	89	42-128	13	0-23	
Pentachlorophenol	69	78	45-135	13	0-20	
Pyrene	75	84	45-135	11	0-20	



**Quality Control - Laboratory Control Sample**

Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/25/02  
 Work Order No: 02-01-1088  
 Preparation: EPA 3545  
 Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-04-010-1,178	Solid	GC/MS P	01/26/02	25JAN032	020101254

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Phenol	10	9.6	96	67-118	
2-Chlorophenol	10	9.4	94	72-119	
1,4-Dichlorobenzene	10	9.3	93	69-118	
N-Nitroso-di-n-propylamine	10	9.8	98	70-112	
1,2,4-Trichlorobenzene	10	8.5	85	65-135	
4-Chloro-3-Methylphenol	10	9.5	95	45-135	
Acenaphthene	10	9.9	99	61-142	
4-Nitrophenol	10	9.9	99	45-135	
2,4-Dinitrotoluene	10	10	103	47-137	
Pentachlorophenol	10	9.3	93	45-135	
Pyrene	10	9.6	96	45-135	



**Quality Control - Spike/Spike Duplicate**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB-4-15	Solid	GC/MS P	01/25/02	01/27/02	0201108813

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	110	110	53-118	0	0-19	
2-Chlorophenol	106	108	60-119	1	0-18	
1,4-Dichlorobenzene	106	107	56-131	2	0-18	
N-Nitroso-di-n-propylamine	111	112	64-123	1	0-18	
1,2,4-Trichlorobenzene	95	94	52-144	2	0-17	
4-Chloro-3-Methylphenol	103	103	45-135	0	0-20	
Acenaphthene	124	125	45-152	0	0-18	
4-Nitrophenol	121	124	45-135	2	0-20	
2,4-Dinitrotoluene	126	126	42-128	0	0-23	
Pentachlorophenol	100	99	45-135	0	0-20	
Pyrene	112	112	45-135	0	0-20	

**Quality Control - Laboratory Control Sample**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-04-010-1,180	Solid	GC/MS P	01/27/02	27JAN005	0201257
Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Phenol	10	9.3	93	67-118	
2-Chlorophenol	10	9.2	92	72-119	
1,4-Dichlorobenzene	10	9.1	91	69-118	
N-Nitroso-di-n-propylamine	10	9.8	98	70-112	
1,2,4-Trichlorobenzene	10	7.9	79	65-135	
4-Chloro-3-Methylphenol	10	8.7	87	45-135	
Acenaphthene	10	9.6	96	61-142	
4-Nitrophenol	10	10	100	45-135	
2,4-Dinitrotoluene	10	9.8	98	47-137	
Pentachlorophenol	10	8.4	84	45-135	
Pyrene	10	8.2	82	45-135	





**Quality Control - Spike/Spike Duplicate**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02-02-0573-6	Solid	GC/MS F	02/14/02	02/14/02	020205736

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	94	96	53-118	1	0-19	
2-Chlorophenol	94	95	60-119	1	0-18	
1,4-Dichlorobenzene	92	93	56-131	1	0-18	
N-Nitroso-di-n-propylamine	99	101	64-123	2	0-18	
1,2,4-Trichlorobenzene	84	86	52-144	2	0-17	
4-Chloro-3-Methylphenol	93	95	45-135	3	0-20	
Acenaphthene	101	104	45-152	3	0-18	
4-Nitrophenol	98	103	45-135	5	0-20	
2,4-Dinitrotoluene	109	111	42-128	2	0-23	
Pentachlorophenol	95	100	45-135	5	0-20	
Pyrene	88	91	45-135	3	0-20	



**Quality Control - Laboratory Control Sample**

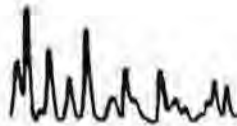
Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/25/02  
 Work Order No: 02-01-1088  
 Preparation: EPA 3545  
 Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
098-04-010-1,192	Solid	GC/MS P	02/14/02	14FEB004	0202142

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Phenol	10	9.9	99	67-118	
2-Chlorophenol	10	9.9	99	72-119	
1,4-Dichlorobenzene	10	9.9	99	69-118	
N-Nitroso-di-n-propylamine	10	10	103	70-112	
1,2,4-Trichlorobenzene	10	9.0	90	65-135	
4-Chloro-3-Methylphenol	10	10	100	45-135	
Acenaphthene	10	11	107	61-142	
4-Nitrophenol	10	10	105	45-135	
2,4-Dinitrotoluene	10	11	112	47-137	
Pentachlorophenol	10	11	106	45-135	
Pyrene	10	9.8	98	45-135	



**QUALITY ASSURANCE SUMMARY**

Method EPA 8270C (Aqueous)

Earth Tech  
Page 1 of 1

Work Order No.: 02-01-1088  
Date Analyzed: 01/25/02

**Surrogate Recoveries (in %)**

<u>Sample Number</u>	<u>S1</u>	<u>S2</u>	<u>S3</u>	<u>S4</u>	<u>S5</u>	<u>S6</u>
LCS 0201252	74	58	97	94	84	96
LCSD 0201252	84	64	104	100	94	100

Surrogate Compound

Aqueous %REC  
Acceptable Limits

S1 > 2-Fluorophenol	15 - 138
S2 > Phenol-d <sub>6</sub>	17 - 141
S3 > Nitrobenzene-d <sub>5</sub>	56 - 123
S4 > 2-Fluorobiphenyl	45 - 120
S5 > 2,4,6-Tribromophenol	32 - 143
S6 > p-Terphenyl-d14	46 - 133



**Quality Control - LCS/LCS Duplicate**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/25/02  
Work Order No: 02-01-1088  
Preparation: EPA 3510B  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-003-914	Aqueous	GC/MS P	01/25/02	01/25/02	0201252

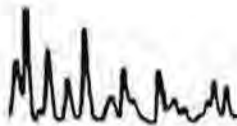
Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	61	67	12-151	10	0-23	
2-Chlorophenol	90	102	45-135	13	0-18	
1,4-Dichlorobenzene	89	98	36-118	9	0-26	
N-Nitroso-di-n-propylamine	99	108	52-128	9	0-13	
1,2,4-Trichlorobenzene	85	92	42-120	7	0-21	
4-Chloro-3-Methylphenol	97	104	20-150	6	0-40	
Acenaphthene	105	112	51-137	6	0-11	
4-Nitrophenol	64	73	20-150	12	0-40	
2,4-Dinitrotoluene	107	114	25-143	6	0-36	
Pentachlorophenol	97	111	20-150	14	0-40	
Pyrene	102	106	45-135	4	0-20	

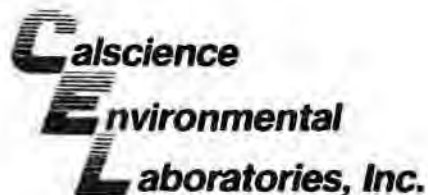


Work Order Number: 02-01-1088

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<u>Qualifier</u>	<u>Definition</u>
J	Analyte was detected at a concentration below the reporting limit. Reported value is estimated.
ND	Not detected at indicated reporting limit.





February 21, 2002  
PM08002

Steve Williams  
Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Subject: Calscience Work Order No.: 02-01-1132  
Client Reference: LAUSD East Valley M. S. /47127

Dear Mr. Williams:

Calscience Environmental Laboratories, Inc. (Calscience) is pleased to submit herewith the subject analytical report. The narrative presented below summarizes our analytical effort and clarifies any quality control anomalies which appear in the report.

#### **Sample Condition on Receipt**

Sixteen soil samples received as part of this Work Order on January 28, 2001. All samples were transferred to the laboratory in an ice-chest following strict chain-of-custody procedures. The temperature of the ice-chest was measured upon arrival in the laboratory and was within acceptable limit (3°C). The samples were logged into the Laboratory Information Management System (LIMS), given laboratory identification numbers, and stored in refrigeration units pending analysis.

#### **Data Summary**

Data is presented on a wet weight basis.

#### **Holding Times**

All holding time requirements were met.

#### **Calibration**

Frequency and control criteria for initial and continuing calibration verifications were met.



### Blanks

The method blank data showed non-detectable levels for all constituents, with the exception of trace levels of cobalt for batch 020128lcs8.

### Matrix Spikes

Matrix spikes (MS) and matrix spike duplicates (MSD) were performed at required frequencies. All recoveries were within acceptable limits, with the exception of antimony for batch 012802ms8. The recoveries were outside the QC limits for the MS and MSD. However, the corresponding Laboratory Control Sample (LCS) recovery was within control limits, indicating a matrix interference effect. Therefore, the data is released without further action or qualification.

### Laboratory Control Samples

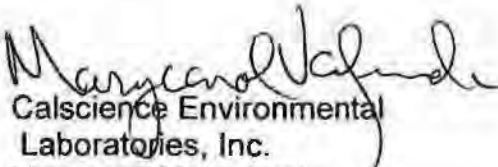
The Laboratory Control Sample (LCS) analysis was performed at the required frequency. All recoveries were within acceptable limits.


### Surrogates

Surrogate recoveries for all samples were within acceptable control limits.

If there are any questions regarding this report, please contact the undersigned at (714) 895-5494.

Sincerely,

  
Calscience Environmental  
Laboratories, Inc.  
Marycarol Valenzuela  
Project Manager

  
Michael J. Crisostomo  
Quality Assurance Manager

1132

Project Number 47127		Project Name/Client LAUSD EAST VALLEY M.S.						Custody Seal #		Earth Tech Cooler #						
Sample Custodian: (Signature) LAWRENCE BROWNE						Analysis Required				Matrix						
Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	PID Reading (ppm)	Label Number	SOILS (TPH)	SOILS (SVOCs)	SOILS (PCBs)	SOILS (Pest)	SOILS (Metals)	WATER	SOIL	ANGERL SAMPLE	SS SLEEVE
1	EQUIP BLANK 1-28	1/28/02	1200	X				X					X		X	
2	SB-14-0.5		1803			0		X	X		X			X		
3	SB-14-7		0905			0		X	X		X					
4	SB-14-10		0810			0		HOLD								
5	SB-14-12		0910			0		HOLD								
6	SB-14-0.5		0849			0		X			X					
7	SB-14-7		1217			0		X			X					
8	SB-14-10		1220			0		HOLD								
9	SB-14-12		0912			0		HOLD								
10	SB-34-20		1030			0		X			X					
11	SB-34-30		1105			0		X	X		X					
12	SB-34-35		1120			0		HOLD								
13	SB-22-12		1315			0		HOLD								
14	SB-21-7		1338			0		X	X	X	X					
15	SB-21-10		1338			0		HOLD								
16	SB-21-12		1343	X		0		HOLD					X		X	
17																
18																

Relinquished by: (Signature) [Signature]	Date / Time 1/28/02 1605	Received by: (Signature) [Signature]	Disposed of by: (Signature)	Items:	Date / Time
Relinquished by: (Signature)	Date / Time 1/28/02 1605	Received by: (Signature) [Signature]	Disposed of by: (Signature)	Items:	Date / Time

Send Lab Results To: STEVE WILLIAMS 100 W. BROADWAY STE 240 LONG BEACH CA 90802 fax (562) 951-2006	Remarks: 24 HR-TAT (METALS 48HR, EQUIP BLANK, FEDERAL EXPRESS AIRBILL NO., LAB: NORMAL TAT)	Check Delivery Method: <input type="checkbox"/> Samples delivered in person <input type="checkbox"/> Common carrier	Laboratory Receiving Notes: Custody Seal Intact? Temp. of Shipping Container: Sample Condition:
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White Copy - Lab

Yellow Copy - File

Pink Copy - Client



## Sample Summary Report

**WORK ORDER #:** 02-01-1132

**QAPP: 0117**

[illegible]

WORK ORDER #: **02**-01-1132

Cooler 1 of 1

## SAMPLE RECEIPT FORM

CLIENT: E-T

DATE: 1/28/02

### TEMPERATURE - SAMPLES RECEIVED BY:

#### CALSCIENCE COURIER:

- ☐ Chilled, cooler with temperature blank provided.
- ☐ Chilled, cooler without temperature blank.
- ☐ Chilled and placed in cooler with wet ice.
- ☐ Ambient and placed in cooler with wet ice.
- ☐ Ambient temperature.
- ☐ °C Temperature blank.

#### LABORATORY (Other than Calscience Courier):

- ☐ °C Temperature blank.
- 3.0 °C IR thermometer.
- ☐ Ambient temperature.

Initial: NC

### CUSTODY SEAL INTACT:

Sample(s): \_\_\_\_\_ Cooler: \_\_\_\_\_ No (Not Intact) : \_\_\_\_\_ Not Applicable (N/A): ✓

Initial: NC

### SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples.....	<u>✓</u>		
Sample container label(s) consistent with custody papers.....	<u>✓</u>		
Sample container(s) intact and good condition.....	<u>✓</u>		
Correct containers for analyses requested.....	<u>✓</u>		
Proper preservation noted on sample label(s).....	<u>✓</u>		
VOA vial(s) free of headspace. ....			<u>✓</u>
Tedlar bag(s) free of condensation.....			<u>✓</u>

Initial: NC

### COMMENTS:

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**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

Page 1 of 3

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-14-0.5	02-01-1132-2	01/28/02	Solid	01/28/02	01/29/02	020128lcs8

Comment(s): Mercury was analyzed on 1/28/02 7:03:18 PM with batch 020128lcs5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0699	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.101	0.250	1	J	mg/kg
Barium	112	0.500	1		mg/kg	Nickel	9.53	0.25	1		mg/kg
Beryllium	0.292	0.250	1		mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.317	0.500	1	J	mg/kg	Silver	0.0427	0.250	1	J	mg/kg
Chromium (Total)	12.4	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	8.67	0.25	1		mg/kg	Vanadium	26.8	0.2	1		mg/kg
Copper	13.9	0.5	1		mg/kg	Zinc	57.0	1.0	1		mg/kg
Lead	16.9	0.5	1		mg/kg						

SB-14-7	02-01-1132-3	01/28/02	Solid	01/28/02	01/29/02	020128lcs8
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Comment(s): Mercury was analyzed on 1/28/02 7:12:32 PM with batch 020128lcs5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	0.0353	0.0835	1	J	mg/kg
Arsenic	0.313	0.750	1	J	mg/kg	Molybdenum	0.0662	0.250	1	J	mg/kg
Barium	38.2	0.5	1		mg/kg	Nickel	2.51	0.25	1		mg/kg
Beryllium	0.0795	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.0751	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	2.85	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	2.62	0.25	1		mg/kg	Vanadium	8.58	0.25	1		mg/kg
Copper	3.45	0.50	1		mg/kg	Zinc	19.9	1.0	1		mg/kg
Lead	1.04	0.50	1		mg/kg						

SB-19-0.5	02-01-1132-6	01/28/02	Solid	01/28/02	01/29/02	020128lcs8
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Comment(s): Mercury was analyzed on 1/28/02 7:15:37 PM with batch 020128lcs5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	ND	0.0835	1		mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.0691	0.250	1	J	mg/kg
Barium	80.1	0.5	1		mg/kg	Nickel	6.99	0.25	1		mg/kg
Beryllium	0.203	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.275	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	9.02	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	7.02	0.25	1		mg/kg	Vanadium	23.6	0.2	1		mg/kg
Copper	8.74	0.50	1		mg/kg	Zinc	39.3	1.0	1		mg/kg
Lead	4.10	0.50	1		mg/kg						

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

Page 2 of 3

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-19-7	02-01-1132-7	01/28/02	Solid	01/28/02	01/29/02	020128ics8

Comment(s): Mercury was analyzed on 1/28/02 7:18:40 PM with batch 020128ics5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	ND	0.0835	1		mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	92.2	0.5	1		mg/kg	Nickel	8.04	0.25	1		mg/kg
Beryllium	0.197	0.250	1	J	mg/kg	Selenium	NO	0.750	1		mg/kg
Cadmium	0.285	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	11.2	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	7.38	0.25	1		mg/kg	Vanadium	23.6	0.2	1		mg/kg
Copper	8.64	0.50	1		mg/kg	Zinc	37.9	1.0	1		mg/kg
Lead	2.08	0.50	1		mg/kg						

SB-34-20	02-01-1132-10	01/28/02	Solid	01/28/02	01/29/02	020128ics8
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Comment(s): Mercury was analyzed on 1/28/02 7:21:39 PM with batch 020128ics5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	ND	0.0835	1		mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.964	0.250	1		mg/kg
Barium	73.5	0.5	1		mg/kg	Nickel	6.39	0.25	1		mg/kg
Beryllium	0.161	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.203	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	12.7	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	5.70	0.25	1		mg/kg	Vanadium	18.4	0.2	1		mg/kg
Copper	8.37	0.50	1		mg/kg	Zinc	30.5	1.0	1		mg/kg
Lead	2.50	0.50	1		mg/kg						

SB-34-30	02-01-1132-11	01/28/02	Solid	01/28/02	01/29/02	020128ics8
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Comment(s): Mercury was analyzed on 1/28/02 7:24:38 PM with batch 020128ics5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	ND	0.0835	1		mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.0785	0.250	1	J	mg/kg
Barium	145	0.500	1		mg/kg	Nickel	9.33	0.25	1		mg/kg
Beryllium	0.161	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.493	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	13.5	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	10.1	0.2	1		mg/kg	Vanadium	25.0	0.2	1		mg/kg
Copper	15.8	0.5	1		mg/kg	Zinc	38.6	1.0	1		mg/kg
Lead	1.34	0.50	1		mg/kg						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

Page 3 of 3

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SE-21-7	02-01-1132-14	01/28/02	Solid	01/28/02	01/29/02	020128lcs8

Comment(s): Mercury was analyzed on 1/28/02 7:33:44 PM with batch 020128lcs5

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Mercury	ND	0.0835	1		mg/kg
Arsenic	0.496	0.750	1	J	mg/kg	Molybdenum	1.53	0.25	1		mg/kg
Barium	81.4	0.5	1		mg/kg	Nickel	6.77	0.25	1		mg/kg
Beryllium	0.186	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.502	0.500	1		mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	18.1	0.2	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	5.92	0.25	1		mg/kg	Vanadium	22.0	0.2	1		mg/kg
Copper	9.90	0.50	1		mg/kg	Zinc	38.1	1.0	1		mg/kg
Lead	39.3	0.5	1		mg/kg						

Method Blank	099-04-007-1,296	N/A	Solid	01/28/02	01/28/02	020128lcs5
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Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0835	1		mg/kg

Method Blank	097-01-002-3,080	N/A	Solid	01/28/02	01/28/02	020128lcs8
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Arsenic	ND	0.750	1		mg/kg	Nickel	ND	0.250	1		mg/kg
Barium	ND	0.500	1		mg/kg	Selenium	ND	0.750	1		mg/kg
Beryllium	ND	0.250	1		mg/kg	Silver	ND	0.250	1		mg/kg
Cadmium	ND	0.500	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Chromium (Total)	ND	0.250	1		mg/kg	Vanadium	ND	0.250	1		mg/kg
Cobalt	0.0138	0.250	1	J	mg/kg	Zinc	ND	1.00	1		mg/kg
Copper	ND	0.500	1		mg/kg	Lead	ND	0.500	1		mg/kg

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: EPA 3545  
Method: EPA 8081A/8082

Project: LAUSD-East Valley M.S. / 47127

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-21-7	02-01-1132-14	01/28/02	Solid	01/28/02	01/29/02	0201283

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Alpha-BHC	ND	5.0	1		ug/kg	4,4'-DDT	ND	5.0	1		ug/kg
Gamma-BHC	ND	5.0	1		ug/kg	Endosulfan Sulfate	ND	5.0	1		ug/kg
Beta-BHC	ND	5.0	1		ug/kg	Methoxychlor	ND	5.0	1		ug/kg
Heptachlor	ND	5.0	1		ug/kg	Chlordane	ND	50	1		ug/kg
Delta-BHC	ND	5.0	1		ug/kg	Toxaphene	ND	100	1		ug/kg
Aldrin	ND	5.0	1		ug/kg	Aroclor-1016	ND	50	1		ug/kg
Heptachlor Epoxide	ND	5.0	1		ug/kg	Aroclor-1221	ND	50	1		ug/kg
Endosulfan I	ND	5.0	1		ug/kg	Aroclor-1232	ND	50	1		ug/kg
Dieldrin	ND	5.0	1		ug/kg	Aroclor-1242	ND	50	1		ug/kg
4,4'-DDE	ND	5.0	1		ug/kg	Aroclor-1248	ND	50	1		ug/kg
Endrin	ND	5.0	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Endrin Aldehyde	ND	5.0	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
4,4'-DDD	ND	5.0	1		ug/kg	Aroclor-1262	ND	50	1		ug/kg
Endosulfan II	ND	5.0	1		ug/kg	Endrin Ketone	ND	5.0	1		ug/kg
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>		<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>	
Decachlorobiphenyl	77	50-130				2,4,5,6-Tetrachloro-m-Xylene	77	50-130			

<b>Method Blank</b>	<b>095-01-014-2,370</b>	<b>N/A</b>	<b>Solid</b>	<b>01/28/02</b>	<b>01/29/02</b>	<b>0201283</b>
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Alpha-BHC	ND	5.0	1		ug/kg	4,4'-DDT	ND	5.0	1		ug/kg
Gamma-BHC	ND	5.0	1		ug/kg	Endosulfan Sulfate	ND	5.0	1		ug/kg
Beta-BHC	ND	5.0	1		ug/kg	Methoxychlor	ND	5.0	1		ug/kg
Heptachlor	ND	5.0	1		ug/kg	Chlordane	ND	50	1		ug/kg
Delta-BHC	ND	5.0	1		ug/kg	Toxaphene	ND	100	1		ug/kg
Aldrin	ND	5.0	1		ug/kg	Aroclor-1016	ND	50	1		ug/kg
Heptachlor Epoxide	ND	5.0	1		ug/kg	Aroclor-1221	ND	50	1		ug/kg
Endosulfan I	ND	5.0	1		ug/kg	Aroclor-1232	ND	50	1		ug/kg
Dieldrin	ND	5.0	1		ug/kg	Aroclor-1242	ND	50	1		ug/kg
4,4'-DDE	ND	5.0	1		ug/kg	Aroclor-1248	ND	50	1		ug/kg
Endrin	ND	5.0	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Endrin Aldehyde	ND	5.0	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
4,4'-DDD	ND	5.0	1		ug/kg	Aroclor-1262	ND	50	1		ug/kg
Endosulfan II	ND	5.0	1		ug/kg	Endrin Ketone	ND	5.0	1		ug/kg
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>		<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>	
Decachlorobiphenyl	75	50-130				2,4,5,6-Tetrachloro-m-Xylene	76	50-130			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: EPA 3545  
Method: EPA 8082

Project: LAUSD-East Valley M.S. / 47127

Page 1 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-14-0.5	02-01-1132-2	01/28/02	Solid	01/28/02	01/29/02	0201283

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	50	1		ug/kg	Aroclor-1248	ND	50	1		ug/kg
Aroclor-1221	ND	50	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Aroclor-1232	ND	50	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
Aroclor-1242	ND	50	1		ug/kg	Aroclor-1262	ND	50	1		ug/kg
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	87	50-130				2,4,5,6-Tetrachloro-m-Xylene	87	50-130			

SB-14-7	02-01-1132-3	01/28/02	Solid	01/28/02	01/29/02	0201283
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	50	1		ug/kg	Aroclor-1248	ND	50	1		ug/kg
Aroclor-1221	ND	50	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Aroclor-1232	ND	50	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
Aroclor-1242	ND	50	1		ug/kg	Aroclor-1262	ND	50	1		ug/kg
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	84	50-130				2,4,5,6-Tetrachloro-m-Xylene	81	50-130			

SB-34-30	02-01-1132-11	01/28/02	Solid	01/28/02	01/29/02	0201283
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	50	1		ug/kg	Aroclor-1248	ND	50	1		ug/kg
Aroclor-1221	ND	50	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Aroclor-1232	ND	50	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
Aroclor-1242	ND	50	1		ug/kg	Aroclor-1262	ND	50	1		ug/kg
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	85	50-130				2,4,5,6-Tetrachloro-m-Xylene	84	50-130			

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: EPA 3545  
Method: EPA 8082

Project: LAUSD-East Valley M.S. / 47127

Page 2 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-07-009-25	N/A	Solid	01/28/02	01/29/02	0201283

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	50	1		ug/kg	Aroclor-1248	ND	50	1		ug/kg
Aroclor-1221	ND	50	1		ug/kg	Aroclor-1254	ND	50	1		ug/kg
Aroclor-1232	ND	50	1		ug/kg	Aroclor-1260	ND	50	1		ug/kg
Aroclor-1242	ND	50	1		ug/kg	Aroclor-1262	ND	50	1		ug/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
Decachlorobiphenyl	85	50-130				2,4,5,6-Tetrachloro-m-Xylene	85	50-130			



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Page 1 of 8

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-14-0.5	02-01-1132-2	01/28/02	Solid	01/28/02	01/29/02	0201289

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>		<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>	
2-Fluorophenol	89	31-142				Phenol-d6	93	30-136			
o-benzene-d5	86	28-139				2-Fluorobiphenyl	90	33-144			
6-Tribromophenol	90	24-152				p-Terphenyl-d14	91	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-14-7	02-01-1132-3	01/28/02	Solid	01/28/02	01/29/02	0201289

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>		<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>	
2-Fluorophenol	77	31-142				Phenol-d6	81	30-136			
benzene-d5	75	28-139				2-Fluorobiphenyl	82	33-144			
6-Tribromophenol	82	24-152				p-Terphenyl-d14	83	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-19-0.5	02-01-1132-8	01/28/02	Solid	01/28/02	01/28/02	0201289

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
n-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>		<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>	
2-Fluorophenol	87	31-142				Phenol-d6	90	30-136			
obenzene-d5	84	28-139				2-Fluorobiphenyl	89	33-144			
,6-Tribromophenol	86	24-152				p-Terphenyl-d14	89	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-19-7	02-01-1132-7	01/28/02	Solid	01/28/02	01/29/02	0201289

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>			<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>		
2-Fluorophenol	92	31-142				Phenol-d6	95	30-136			
benzene-d5	87	28-139				2-Fluorobiphenyl	93	33-144			
6-Tribromophenol	91	24-152				p-Terphenyl-d14	92	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-34-20	02-01-1132-10	01/28/02	Solid	01/28/02	01/29/02	0201289

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>			<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>		
2-Fluorophenol	79	31-142				Phenol-d6	82	30-136			
benzene-d5	76	28-139				2-Fluorobiphenyl	82	33-144			
6-Tribromophenol	78	24-152				p-Terphenyl-d14	81	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-34-38	02-01-1132-11	01/28/02	Solid	01/28/02	01/29/02	0201289

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
1,2-Dichloro-2-propylamine	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Surrogates:	REC (%)	Control Limits	Qual			Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	84	31-142				Phenol-d6	89	30-136			
1-Benzene-d5	81	28-139				2-Fluorobiphenyl	88	33-144			
i-Tribromophenol	85	24-152				p-Terphenyl-d14	88	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

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Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-21-7	02-01-1132-14	01/28/02	Solid	01/28/02	01/29/02	0201289

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits	Qual			Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	22	31-142	2			Phenol-d6	68	30-136			
o-benzene-d5	79	28-139				2-Fluorobiphenyl	84	33-144			
o-Tribromophenol	0	24-152	2			p-Terphenyl-d14	82	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Page 8 of 8

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-04-010-1,181	N/A	Solid	01/28/02	01/29/02	0201289

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	NO	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
'2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
N-Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>			<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>		
2-Fluorophenol	102	31-142				Phenol-d6	104	30-136			
o-benzene-d5	95	28-139				2-Fluorobiphenyl	97	33-144			
o-Tribromophenol	96	24-152				p-Terphenyl-d14	98	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: EPA 3510B  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Page 1 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	095-01-003-917	N/A	Aqueous	01/28/02	01/30/02	02012810

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						
Surrogates:	REC (%)	Control Limits	Qual			Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	58	15-138				Phenol-d6	47	17-141			
Nitrobenzene-d5	89	56-123				2-Fluorobiphenyl	82	45-120			
2,4,6-Tribromophenol	72	32-143				p-Terphenyl-d14	89	46-133			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: EPA 3520B  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Page 2 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Equipment Blank 1-28	02-01-1132-1	01/28/02	Aqueous	01/28/02	01/30/02	02012810

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
1,4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						
Surrogates:	REC (%)	Control Limits	Qual			Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	55	15-138				Phenol-d6	41	17-141			
Nitrobenzene-d5	94	56-123				2-Fluorobiphenyl	99	45-120			
2,4,6-Tribromophenol	101	32-143				p-Terphenyl-d14	100	46-133			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**Quality Control - Spike/Spike Duplicate**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: Total Digestion  
Method: EPA 6010B

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02-01-1116-23	Solid	ICP 3300	01/28/02	01/29/02	012802ms8

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	47	46	50-115	3	0-20	3
Arsenic	94	94	75-125	0	0-20	
Barium	104	110	75-125	2	0-20	
Beryllium	95	83	75-125	2	0-20	
Cadmium	98	96	75-125	2	0-20	
Chromium (Total)	100	100	75-125	0	0-20	
Cobalt	99	99	75-125	1	0-20	
Copper	103	106	75-125	2	0-20	
Lead	96	96	75-125	0	0-20	
Molybdenum	96	94	75-125	2	0-20	
Nickel	99	100	75-125	0	0-20	
Selenium	99	96	75-125	3	0-20	
Silver	101	100	75-125	1	0-20	
Thallium	91	89	75-125	2	0-20	
Vanadium	103	108	75-125	2	0-20	
Zinc	90	91	75-125	1	0-20	



**Quality Control - Laboratory Control Sample**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: Total Digestion  
Method: EPA 6010B

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-002-3,080	Solid	ICP 3300	01/29/02	020128-1	020128-cs8

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Antimony	50.0	54.7	109	80-120	
Arsenic	50.0	49.8	100	80-120	
Barium	50.0	56.0	112	80-120	
Beryllium	50.0	50.1	100	80-120	
Cadmium	50.0	54.0	108	80-120	
Chromium (Total)	50.0	53.0	106	80-120	
Cobalt	50.0	55.8	112	80-120	
Copper	50.0	50.7	101	80-120	
Lead	50.0	53.2	106	80-120	
Molybdenum	50.0	52.9	106	80-120	
Nickel	50.0	55.1	110	80-120	
Selenium	50.0	50.4	101	80-120	
Silver	25.0	25.3	101	80-120	
Thallium	50.0	53.8	108	80-120	
Vanadium	50.0	51.9	104	80-120	
Zinc	50.0	54.9	110	80-120	



**Quality Control - Spike/Spike Duplicate**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: Total Digestion  
Method: EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB-14-0.5	Solid	Mercury	01/28/02	01/28/02	012602ms5

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	113	114	76-136	1	0-16	



**Quality Control - Laboratory Control Sample**

Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/28/02  
 Work Order No: 02-01-1132  
 Preparation: Total Digestion  
 Method: EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-04-007-1,296	Solid	Mercury	01/28/02	020128-L	0201281cs5
Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Mercury	0.835	0.860	103	82-124	



**QUALITY ASSURANCE SUMMARY**

Method EPA 8081A / 8082 (Solids)

Earth Tech  
Page 1 of 1

Work Order No.: 02-01-1132  
Date Analyzed: 01/29/02

**Surrogate Recoveries (in %)**

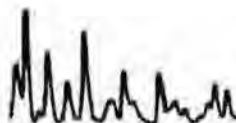
<u>Sample Number</u>	<u>S1</u>	<u>S2</u>
MS SB-21-7	74	74
MSD SB-21-7	73	62
LCS 0201283	76	78

Surrogate Compound

S1 > Decachlorobiphenyl  
S2 > 2,4,5,6-Tetrachloro-m-Xylene

Solid %REC  
Acceptable Limits

50 - 130  
50 - 130



**Quality Control - Spike/Spike Duplicate**

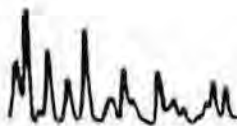
Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/28/02  
 Work Order No: 02-01-1132  
 Preparation: EPA 3545  
 Method: EPA 8081A/8082

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB-21-7	Solid	GC 16	01/28/02	01/29/02	0201113214

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gamma-BHC	93	84	50-135	10	0-25	
Heptachlor	92	83	50-135	11	0-25	
Endosulfan I	74	78	50-135	4	0-25	
Dieldrin	93	83	50-135	11	0-25	
Endrin	110	96	50-135	13	0-25	
4,4'-DDT	100	91	50-135	9	0-25	





**Quality Control - Laboratory Control Sample**

Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/28/02  
 Work Order No: 02-01-1132  
 Preparation: EPA 3545  
 Method: EPA 8081A/8082

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
085-01-014-2,370	Solid	GC 16	01/29/02	NONE	0201283

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Gamma-BHC	25	22	88	50-135	
Heptachlor	25	22	87	50-135	
Endosulfan I	25	21	86	50-135	
Dieldrin	25	22	87	50-135	
Endrin	25	24	95	50-135	
4,4'-DDT	25	23	91	50-135	
Aroclor-1260	100	76	76	50-135	

**QUALITY ASSURANCE SUMMARY**

Method EPA 8082 (Solids)

Earth Tech  
Page 1 of 1

Work Order No.: 02-01-1132  
Date Analyzed: 01/29/02

**Surrogate Recoveries (in %)**

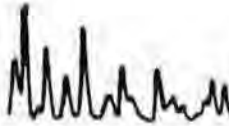
<u>Sample Number</u>	<u>S1</u>	<u>S2</u>
LCS 0201283	85	82
LCSD 0201283	95	89

Surrogate Compound

S1 > Decachlorobiphenyl  
S2 > 2,4,5,6-Tetrachloro-m-Xylene

Solid %REC  
Acceptable Limits

50 - 130  
50 - 130



**Quality Control - LCS/LCS Duplicate**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: EPA 3545  
Method: EPA 8082

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-009-26	Solid	GC 10	01/28/02	01/29/02	0201283

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aroclor-1260	76	83	50-135	8	0-25	



**QUALITY ASSURANCE SUMMARY**  
 Method EPA 8270C (Solids)

Earth Tech  
 Page 1 of 1

Work Order No.: 02-01-1132  
 Date Analyzed: 01/29/02

**Surrogate Recoveries (in %)**

<u>Sample Number</u>	<u>S1</u>	<u>S2</u>	<u>S3</u>	<u>S4</u>	<u>S5</u>	<u>S6</u>
MS SB-34-20	99	100	90	96	94	99
MSD SB-34-20	87	90	83	91	85	92
LCS 0201289	107	106	94	97	97	102

Surrogate Compound

Solid %REC  
Acceptable Limits

S1 > 2-Fluorophenol	31 - 142
S2 > Phenol-d <sub>6</sub>	30 - 136
S3 > Nitrobenzene-d <sub>5</sub>	28 - 139
S4 > 2-Fluorobiphenyl	33 - 144
S5 > 2,4,6-Tribromophenol	24 - 152
S6 > p-Terphenyl-d14	23 - 160



**Quality Control - Spike/Spike Duplicate**

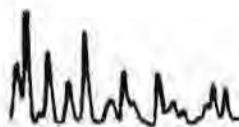
Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB-34-20	Solid	GC/MS J	01/28/02	01/29/02	0201113210

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	100	89	53-118	12	0-18	
2-Chlorophenol	102	88	60-119	14	0-18	
1,4-Dichlorobenzene	99	86	56-131	14	0-18	
N-Nitroso-di-n-propylamine	97	86	64-123	13	0-18	
1,2,4-Trichlorobenzene	89	80	52-144	10	0-17	
4-Chloro-3-Methylphenol	94	85	45-135	10	0-20	
Acenaphthene	101	93	45-152	8	0-18	
4-Nitrophenol	91	85	45-135	7	0-20	
2,4-Dinitrotoluene	108	100	42-128	8	0-23	
Pentachlorophenol	94	84	45-135	12	0-20	
Pyrene	100	90	45-135	10	0-20	



**Quality Control - Laboratory Control Sample**

Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 01/28/02  
 Work Order No: 02-01-1132  
 Preparation: EPA 3545  
 Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-04-010-1,181	Solid	GC/MS J	01/29/02	29JAN004	0201289

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Phenol	10	10	102	67-118	
2-Chlorophenol	10	11	105	72-119	
1,4-Dichlorobenzene	10	10	102	69-118	
N-Nitroso-di-n-propylamine	10	10	100	70-112	
1,2,4-Trichlorobenzene	10	8.7	87	65-135	
4-Chloro-3-Methylphenol	10	9.4	94	45-135	
Acenaphthene	10	9.8	98	61-142	
4-Nitrophenol	10	9.5	95	45-135	
2,4-Dinitrotoluene	10	11	111	47-137	
Pentachlorophenol	10	9.2	92	45-135	
Pyrene	10	10	100	45-135	

**QUALITY ASSURANCE SUMMARY**  
Method EPA 8270C (Aqueous)

Earth Tech  
Page 1 of 1

Work Order No.: 02-01-1132  
Date Analyzed: 01/29/02

**Surrogate Recoveries (in %)**

<u>Sample Number</u>	<u>S1</u>	<u>S2</u>	<u>S3</u>	<u>S4</u>	<u>S5</u>	<u>S6</u>
LCS	68	55	82	85	79	87
LCSD	75	58	84	86	86	87

Surrogate Compound

Aqueous %REC  
Acceptable Limits

S1 > 2-Fluorophenol	15 - 138
S2 > Phenol-d <sub>6</sub>	17 - 141
S3 > Nitrobenzene-d <sub>5</sub>	56 - 123
S4 > 2-Fluorobiphenyl	45 - 120
S5 > 2,4,6-Tribromophenol	32 - 143
S6 > p-Terphenyl-d <sub>14</sub>	46 - 133



**Quality Control - LCS/LCS Duplicate**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 01/28/02  
Work Order No: 02-01-1132  
Preparation: EPA 3510B  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-003-917	Aqueous	GC/MS J	01/28/02	01/30/02	02012810

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	57	61	12-151	6	0-23	
2-Chlorophenol	85	93	45-136	9	0-18	
1,4-Dichlorobenzene	85	89	36-118	4	0-26	
N-Nitroso-di-n-propylamine	87	91	52-128	4	0-13	
1,2,4-Trichlorobenzene	79	80	42-120	2	0-21	
4-Chloro-3-Methylphenol	85	88	20-150	3	0-40	
Acenaphthene	88	89	51-137	1	0-11	
4-Nitrophenol	51	58	20-150	13	0-40	
2,4-Dinitrotoluene	97	100	25-143	3	0-36	
Pentachlorophenol	74	82	20-150	11	0-40	
Pyrene	89	89	45-135	0	0-20	

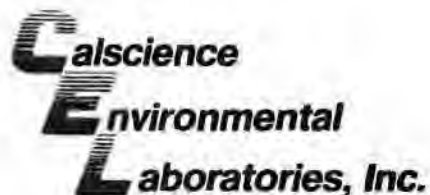


Work Order Number: 02-01-1132

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<u>Qualifier</u>	<u>Definition</u>
3	Spike or Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
J	Analyte was detected at a concentration below the reporting limit. Reported value is estimated.
ND	Not detected at indicated reporting limit.





February 21, 2002  
PM07902

Steve Williams  
Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Subject: Calscience Work Order No.: 02-02-0045  
Client Reference: LAUSD East Valley M.S. /47127

Dear Mr. Williams:

Calscience Environmental Laboratories, Inc. (Calscience) is pleased to submit herewith the subject analytical report. The narrative presented below summarizes our analytical effort and clarifies any quality control anomalies which appear in the report.

**Sample Condition on Receipt**

Three soil samples were received as part of this Work Order on February 1, 2001. All samples were transferred to the laboratory in an ice-chest following strict chain-of-custody procedures. The temperature of the ice-chest was measured upon arrival in the laboratory and was within acceptable limit (2°C). The samples were logged into the Laboratory Information Management System (LIMS), given laboratory identification numbers, and stored in refrigeration units pending analysis.

**Data Summary**

Data is presented on a wet weight basis.

Included in this report is the physical test that was performed by PTS Laboratories.

Holding Times

All holding time requirements were met.



### Calibration

Frequency and control criteria for initial and continuing calibration verifications were met.

### Blanks

The method blank data showed non-detectable levels for all constituents, with the exception of trace levels of molybdenum for batch 020201lcs6a.

### Matrix Spikes

Matrix spikes (MS) and matrix spike duplicates (MSD) were performed at required frequencies. All recoveries were within acceptable limits, with the exception of antimony for batch 020102ms6. The recoveries were outside the QC limits for the MS and MSD. However, the corresponding Laboratory Control Sample (LCS) recovery was within control limits, indicating a matrix interference effect. Therefore, the data is released without further action or qualification.

### Laboratory Control Samples

The Laboratory Control Sample (LCS) analysis was performed at the required frequency. All recoveries were within acceptable limits.


### Surrogates

Surrogate recoveries for all samples were within acceptable control limits.

If there are any questions regarding this report, please contact the undersigned at (714) 895-5494.

Sincerely,

  
CalScience Environmental  
Laboratories, Inc.  
Marycarol Valenzuela  
Project Manager

  
Michael J. Crisostomo  
Quality Assurance Manager

0045



Project Number <b>41127</b>		Project Name/Client <b>LAUSD EAST VALLEY M.S.</b>		Custody Seal #		Rust E&I Cooler #	
Sample Custodian: (Signature) <i>Lawrence Brown</i>				Analysis Required		Matrix	
Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	PID Reading (ppm)	Label Number
1	SB-29-2	2/1/02		X		0	
2	SB-29-7	1		X		0	
3	SB-29-PHYSICAL	1		X		0	
4							
5							
6							
7							
8							
9							
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11							
12							
13							
14							
15							
16							
17							
18							
Relinquished by: (Signature) <i>Lawrence Brown</i>		Date / Time 2/1/02		Received by: (Signature) <i>Steve Williams</i>		Disposed of by: (Signature)	
Relinquished by: (Signature)		Date / Time 2/1/02		Received by: (Signature) <i>Steve Williams</i>		Disposed of by: (Signature)	
Send Lab Results To: <b>STEVE WILLIAMS 100 W. BROADWAY STE 240 LONG BEACH CA 90802 fax (562) 951-2080</b>		Remarks: <b>24 HR TAT 48 HR TAT - 6010</b>		Check Delivery Method: <input type="checkbox"/> Samples delivered in person <input type="checkbox"/> Common carrier		Laboratory Receiving Notes: Custody Seal Intact? Temp. of Shipping Container: Sample Condition:	



**CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.**  
**Sample Summary Report**

**WORK ORDER #:** 02-02-0045

**QAPP: 0117**

[illegible]

WORK ORDER #: **02**-02-0015

Cooler 1 of 1

## SAMPLE RECEIPT FORM

CLIENT: EARTH TEST

DATE: 2/01/02

### TEMPERATURE - SAMPLES RECEIVED BY:

#### CALSCIENCE COURIER:

- ☐ Chilled, cooler with temperature blank provided.  
☐ Chilled, cooler without temperature blank.  
☐ Chilled and placed in cooler with wet ice.  
☐ Ambient and placed in cooler with wet ice.  
☐ Ambient temperature.  
☐ °C Temperature blank.

#### LABORATORY (Other than Calscience Courier):

- ☐ °C Temperature blank.  
2 °C IR thermometer.  
☐ Ambient temperature.

Initial: [Signature]

### CUSTODY SEAL INTACT:

Sample(s): \_\_\_\_\_ Cooler: \_\_\_\_\_ No (Not Intact) : \_\_\_\_\_ Not Applicable (N/A): ✓  
Initial: [Signature]

### SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples.....	<u>✓</u>		
Sample container label(s) consistent with custody papers.....	<u>✓</u>		
Sample container(s) intact and good condition.....	<u>✓</u>		
Correct containers for analyses requested.....	<u>✓</u>		
Proper preservation noted on sample label(s).....	<u>✓</u>		<u>✓</u>
VOA vial(s) free of headspace. ....			<u>✓</u>
Tedlar bag(s) free of condensation.....			<u>✓</u>

Initial: [Signature]

### COMMENTS:

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**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/01/02  
Work Order No: 02-02-0045  
Preparation: Total Digestion  
Method: EPA 6010B / EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-29-2	02-02-0045-1	02/01/02	Solid	02/01/02	02/01/02	0202011c6a

Comment(s): Mercury was analyzed on 2/1/02 5:57:53 PM with batch 0202011cs3

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.520	0.750	1	J	mg/kg	Mercury	0.0222	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	0.0441	0.250	1	J	mg/kg
Barium	67.6	0.5	1		mg/kg	Nickel	5.93	0.25	1		mg/kg
Beryllium	0.220	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.172	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	8.20	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	6.87	0.25	1		mg/kg	Vanadium	17.5	0.2	1		mg/kg
Copper	6.91	0.50	1		mg/kg	Zinc	29.7	1.0	1		mg/kg
Lead	1.99	0.50	1		mg/kg						

SB-29-7	02-02-0045-2	02/01/02	Solid	02/01/02	02/01/02	0202011c6a
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Comment(s): Mercury was analyzed on 2/1/02 6:00:55 PM with batch 0202011cs3

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.342	0.750	1	J	mg/kg	Mercury	0.0225	0.0835	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Molybdenum	ND	0.250	1		mg/kg
Barium	51.3	0.5	1		mg/kg	Nickel	3.53	0.25	1		mg/kg
Beryllium	0.142	0.250	1	J	mg/kg	Selenium	ND	0.750	1		mg/kg
Cadmium	0.120	0.500	1	J	mg/kg	Silver	ND	0.250	1		mg/kg
Chromium (Total)	4.53	0.25	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Cobalt	3.85	0.25	1		mg/kg	Vanadium	11.7	0.2	1		mg/kg
Copper	3.86	0.50	1		mg/kg	Zinc	19.4	1.0	1		mg/kg
Lead	1.60	0.50	1		mg/kg						

Method Blank	098-04-007-1,304	N/A	Solid	02/01/02	02/01/02	0202011cs3
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Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0835	1		mg/kg

Method Blank	097-01-002-3,094	N/A	Solid	02/01/02	02/01/02	0202011c6a
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.750	1		mg/kg	Molybdenum	0.0282	0.250	1	J	mg/kg
Arsenic	ND	0.750	1		mg/kg	Nickel	ND	0.250	1		mg/kg
Barium	ND	0.500	1		mg/kg	Selenium	ND	0.750	1		mg/kg
Beryllium	ND	0.250	1		mg/kg	Silver	ND	0.250	1		mg/kg
Cadmium	ND	0.500	1		mg/kg	Thallium	ND	0.750	1		mg/kg
Chromium (Total)	ND	0.250	1		mg/kg	Vanadium	ND	0.250	1		mg/kg
Cobalt	ND	0.250	1		mg/kg	Zinc	ND	1.00	1		mg/kg
Copper	ND	0.500	1		mg/kg	Lead	ND	0.500	1		mg/kg

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/01/02  
Work Order No: 02-02-0045  
Preparation: Ext. + D/I  
Method: TPH - Carbon Range

Project: LAUSD-East Valley M.S. / 47127

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-29-2	02-02-0045-1	02/01/02	Solid	02/01/02	02/02/02	02020108sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual							
Decachlorobiphenyl	122	45-149									

SB-29-7	02-02-0045-2	02/01/02	Solid	02/01/02	02/02/02	02020108sa
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Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		mg/kg	C19-C20	ND		1		mg/kg
C8	ND		1		mg/kg	C21-C22	ND		1		mg/kg
C9-C10	ND		1		mg/kg	C23-C24	ND		1		mg/kg
C11-C12	ND		1		mg/kg	C25-C28	ND		1		mg/kg
C13-C14	ND		1		mg/kg	C29-C32	ND		1		mg/kg
C15-C16	ND		1		mg/kg	C33-C36	ND		1		mg/kg
C17-C18	ND		1		mg/kg	C7-C36 Total	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual							
Decachlorobiphenyl	110	45-149									

Method Blank	098-03-002-1,522	N/A	Solid	02/01/02	02/01/02	02020108sa
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Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	5.0	1		mg/kg
Surrogates:	REC (%)	Control Limits		Qual	
Decachlorobiphenyl	103	45-149			



**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/01/02  
Work Order No: 02-02-0045  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Page 1 of 3

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-29-2	02-02-0045-1	02/01/02	Solid	02/01/02	02/01/02	0201313

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
trans-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>			<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>	<b>Qual</b>		
2-Fluorophenol	90	31-142				Phenol-d6	96	30-136			
Nitrobenzene-d5	87	28-139				2-Fluorobiphenyl	90	33-144			
2,4,6-Tribromophenol	86	24-152				p-Terphenyl-d14	86	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/01/02  
Work Order No: 02-02-0045  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Page 2 of 3

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SB-29-7	02-02-0045-2	02/01/02	Solid	02/01/02	02/01/02	0201313

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
Nitroso-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>	
		<u>Limits</u>						<u>Limits</u>			
2-Fluorophenol	95	31-142				Phenol-d6	102	30-136			
Nitrobenzene-d5	91	28-139				2-Fluorobiphenyl	97	33-144			
2,4,6-Tribromophenol	91	24-152				p-Terphenyl-d14	95	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**ANALYTICAL REPORT**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/01/02  
Work Order No: 02-02-0045  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Page 3 of 3

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-04-010-1,183	N/A	Solid	01/31/02	02/01/02	0201313

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	0.50	1		mg/kg	2,4-Dinitrophenol	ND	2.5	1		mg/kg
Aniline	ND	0.50	1		mg/kg	4-Nitrophenol	ND	0.50	1		mg/kg
Phenol	ND	0.50	1		mg/kg	Dibenzofuran	ND	0.50	1		mg/kg
Bis(2-Chloroethyl) Ether	ND	2.5	1		mg/kg	2,4-Dinitrotoluene	ND	0.50	1		mg/kg
2-Chlorophenol	ND	0.50	1		mg/kg	2,6-Dinitrotoluene	ND	0.50	1		mg/kg
1,3-Dichlorobenzene	ND	0.50	1		mg/kg	Diethyl Phthalate	ND	0.50	1		mg/kg
1,4-Dichlorobenzene	ND	0.50	1		mg/kg	4-Chlorophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Benzyl Alcohol	ND	0.50	1		mg/kg	Fluorene	ND	0.40	1		mg/kg
1,2-Dichlorobenzene	ND	0.50	1		mg/kg	4-Nitroaniline	ND	0.50	1		mg/kg
2-Methylphenol	ND	0.50	1		mg/kg	Azobenzene	ND	0.50	1		mg/kg
Bis(2-Chloroisopropyl) Ether	ND	0.50	1		mg/kg	4,6-Dinitro-2-Methylphenol	ND	2.5	1		mg/kg
Methylphenol	ND	0.50	1		mg/kg	N-Nitrosodiphenylamine	ND	0.50	1		mg/kg
transo-di-n-propylamine	ND	0.50	1		mg/kg	2,4,6-Trichlorophenol	ND	0.50	1		mg/kg
Hexachloroethane	ND	0.50	1		mg/kg	4-Bromophenyl-Phenyl Ether	ND	0.50	1		mg/kg
Nitrobenzene	ND	2.5	1		mg/kg	Hexachlorobenzene	ND	0.50	1		mg/kg
Isophorone	ND	0.50	1		mg/kg	Pentachlorophenol	ND	2.5	1		mg/kg
2-Nitrophenol	ND	0.50	1		mg/kg	Phenanthrene	ND	0.40	1		mg/kg
2,4-Dimethylphenol	ND	0.50	1		mg/kg	Anthracene	ND	0.40	1		mg/kg
Benzoic Acid	ND	2.5	1		mg/kg	Di-n-Butyl Phthalate	ND	0.50	1		mg/kg
Bis(2-Chloroethoxy) Methane	ND	0.50	1		mg/kg	Fluoranthene	ND	0.40	1		mg/kg
2,4-Dichlorophenol	ND	0.50	1		mg/kg	Benzidine	ND	10	1		mg/kg
1,2,4-Trichlorobenzene	ND	0.50	1		mg/kg	Pyrene	ND	0.40	1		mg/kg
Naphthalene	ND	0.40	1		mg/kg	Pyridine	ND	0.50	1		mg/kg
4-Chloroaniline	ND	0.50	1		mg/kg	Butyl Benzyl Phthalate	ND	0.50	1		mg/kg
Hexachloro-1,3-Butadiene	ND	0.50	1		mg/kg	3,3'-Dichlorobenzidine	ND	0.50	1		mg/kg
4-Chloro-3-Methylphenol	ND	0.50	1		mg/kg	Benzo (a) Anthracene	ND	0.40	1		mg/kg
2-Methylnaphthalene	ND	0.40	1		mg/kg	Bis(2-Ethylhexyl) Phthalate	ND	0.50	1		mg/kg
1-Methylnaphthalene	ND	0.40	1		mg/kg	Chrysene	ND	0.40	1		mg/kg
Hexachlorocyclopentadiene	ND	1.5	1		mg/kg	Di-n-Octyl Phthalate	ND	0.50	1		mg/kg
2,4,5-Trichlorophenol	ND	0.50	1		mg/kg	Benzo (k) Fluoranthene	ND	0.40	1		mg/kg
2-Chloronaphthalene	ND	0.50	1		mg/kg	Benzo (b) Fluoranthene	ND	0.40	1		mg/kg
2-Nitroaniline	ND	0.50	1		mg/kg	Benzo (a) Pyrene	ND	0.35	1		mg/kg
Dimethyl Phthalate	ND	0.50	1		mg/kg	Indeno (1,2,3-c,d) Pyrene	ND	0.40	1		mg/kg
Acenaphthylene	ND	0.40	1		mg/kg	Dibenz (a,h) Anthracene	ND	0.40	1		mg/kg
3-Nitroaniline	ND	0.50	1		mg/kg	Benzo (g,h,i) Perylene	ND	0.40	1		mg/kg
Acenaphthene	ND	0.40	1		mg/kg						
Surrogates:	REC (%)	Control Limits	Qual			Surrogates:	REC (%)	Control Limits	Qual		
2-Fluorophenol	94	31-142				Phenol-d6	99	30-136			
Nitrobenzene-d5	91	28-139				2-Fluorobiphenyl	97	33-144			
2,4,6-Tribromophenol	90	24-152				p-Terphenyl-d14	95	23-160			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

**Quality Control - Spike/Spike Duplicate**

Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 02/01/02  
 Work Order No: 02-02-0045  
 Preparation: Total Digestion  
 Method: EPA 6010B

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02-01-1333-5	Solid	ICP 3300	02/01/02	02/04/02	020102ms5

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	39	44	50-115	12	0-20	3
Arsenic	82	86	75-125	5	0-20	
Barium	80	97	75-125	7	0-20	
Beryllium	88	91	75-125	4	0-20	
Cadmium	89	93	75-125	5	0-20	
Chromium (Total)	88	94	75-125	5	0-20	
Cobalt	91	96	75-125	5	0-20	
Copper	86	93	75-125	7	0-20	
Lead	75	82	75-125	4	0-20	
Molybdenum	84	89	75-125	5	0-20	
Nickel	90	96	75-125	5	0-20	
Selenium	84	87	75-125	4	0-20	
Silver	86	91	75-125	5	0-20	
Thallium	83	87	75-125	5	0-20	
Vanadium	85	92	75-125	6	0-20	
Zinc	80	91	75-125	5	0-20	





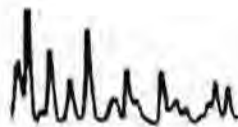
Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/01/02  
Work Order No: 02-02-0045  
Preparation: Total Digestion  
Method: EPA 6010B

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-002-3,034	Solid	ICP 3300	02/01/02	020201lc	020201lc-6a

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Antimony	50.0	49.3	99	80-120	
Arsenic	50.0	45.8	92	80-120	
Barium	50.0	51.2	102	80-120	
Beryllium	50.0	47.9	96	80-120	
Cadmium	50.0	50.2	100	80-120	
Chromium (Total)	50.0	49.5	99	80-120	
Cobalt	50.0	52.3	105	80-120	
Copper	50.0	48.0	96	80-120	
Lead	50.0	49.1	98	80-120	
Molybdenum	50.0	48.3	97	80-120	
Nickel	50.0	51.5	103	80-120	
Selenium	50.0	46.1	92	80-120	
Silver	25.0	23.6	94	80-120	
Thallium	50.0	48.7	97	80-120	
Vanadium	50.0	48.0	96	80-120	
Zinc	50.0	50.6	101	80-120	



**Quality Control - Spike/Spike Duplicate**

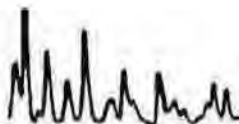
Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 02/01/02  
 Work Order No: 02-02-0045  
 Preparation: Total Digestion  
 Method: EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02-01-1333-5	Solid	Mercury	02/01/02	02/01/02	020102ms3

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	121	121	76-136	0	0-16	



**Quality Control - Laboratory Control Sample**

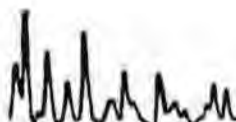
Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 02/01/02  
 Work Order No: 02-02-0045  
 Preparation: Total Digestion  
 Method: EPA 7471A

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-01-007-1,304	Solid	Mercury	02/01/02	020201-L	020201ics3

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Mercury	0.835	0.892	107	82-124	



**QUALITY ASSURANCE SUMMARY**  
Method EPA 8015M - Carbon Chain (Solids)

Earth Tech  
Page 1 of 1

Work Order No.: 02-02-0045  
Date Analyzed: 02/01/02

**Surrogate Recoveries (in %)**

<u>Sample Number</u>	<u>S1</u>
MS 02020108ms	104
MSD 02020108ms	106
LCS 02020108sa	105

Surrogate Compound

S1 > Decachlorobiphenyl

Solid %REC  
Acceptable Limits

45 - 149





**Quality Control - Spike/Spike Duplicate**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/01/02  
Work Order No: 02-02-0045  
Preparation: Ext. + D/I  
Method: TPH - Carbon Range

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02-02-0045-1	Solid	GC 23	02/01/02	02/01/02	02020108ms

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	97	99	49-139	2	0-28	



**Quality Control - Laboratory Control Sample**

Earth Tech  
 100 West Broadway, Suite 240  
 Long Beach, CA 90802-4432

Date Received: 02/01/02  
 Work Order No: 02-02-0045  
 Preparation: Ext. + D/I  
 Method: TPH - Carbon Range

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
098-03-002-1,622	Solid	GC 23	02/01/02	003F0101	02020108sa

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
TPH as Diesel	400	390	98	65-124	



**QUALITY ASSURANCE SUMMARY**  
Method EPA 8270C (Solids)

Earth Tech  
Page 1 of 1

Work Order No.: 02-02-0045  
Date Analyzed: 01/31/02

**Surrogate Recoveries (in %)**

<u>Sample Number</u>	<u>S1</u>	<u>S2</u>	<u>S3</u>	<u>S4</u>	<u>S5</u>	<u>S6</u>
MS 020112942	85	91	79	77	79	92
MSD 020112942	86	92	84	86	82	94
LCS 0201313	91	95	86	93	87	94

Surrogate Compound

Solid %REC  
Acceptable Limits

S1 > 2-Fluorophenol	31 - 142
S2 > Phenol-d <sub>6</sub>	30 - 136
S3 > Nitrobenzene-d <sub>5</sub>	28 - 139
S4 > 2-Fluorobiphenyl	33 - 144
S5 > 2,4,6-Tribromophenol	24 - 152
S6 > p-Terphenyl-d14	23 - 160



**Quality Control - Spike/Spike Duplicate**

Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/01/02  
Work Order No: 02-02-0045  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02-01-1294-2	Solid	GC/MS J	01/31/02	01/31/02	020112942

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	97	94	53-118	4	0-19	
2-Chlorophenol	93	90	60-119	4	0-18	
1,4-Dichlorobenzene	92	90	56-131	2	0-18	
N-Nitroso-di-n-propylamine	91	88	64-123	4	0-18	
1,2,4-Trichlorobenzene	80	82	52-144	3	0-17	
4-Chloro-3-Methylphenol	86	86	45-135	0	0-20	
Acenaphthene	91	91	45-152	0	0-18	
4-Nitrophenol	86	80	45-135	7	0-20	
2,4-Dinitrotoluene	101	98	42-128	3	0-23	
Pentachlorophenol	82	75	45-135	9	0-20	
Pyrene	92	94	45-135	2	0-20	





Earth Tech  
100 West Broadway, Suite 240  
Long Beach, CA 90802-4432

Date Received: 02/01/02  
Work Order No: 02-02-0045  
Preparation: EPA 3545  
Method: EPA 8270C

Project: LAUSD-East Valley M.S. / 47127

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
009-04-010-1,183	Solid	GC/MS J	02/01/02	01FEB010	0201313

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Phenol	10	9.9	99	67-118	
2-Chlorophenol	10	9.6	96	72-119	
1,4-Dichlorobenzene	10	9.8	98	69-118	
N-Nitroso-di-n-propylamine	10	9.4	94	70-112	
1,2,4-Trichlorobenzene	10	8.7	87	65-135	
4-Chloro-3-Methylphenol	10	9.3	93	45-135	
Acenaphthene	10	9.9	99	61-142	
4-Nitrophenol	10	9.2	92	45-135	
2,4-Dinitrotoluene	10	10	104	47-137	
Pentachlorophenol	10	8.6	86	45-135	
Pyrene	10	9.8	98	45-135	

Work Order Number: 02-02-0045

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<u>Qualifier</u>	<u>Definition</u>
J	Analyte was detected at a concentration below the reporting limit. Reported value is estimated.
ND	Not detected at indicated reporting limit.



February 12, 2002

Ms. Marycarol Valenzuela  
Calscience  
7440 Lincoln Way  
Garden Grove, CA 92841

Re: 02-02-0045  
PTS File: 32044

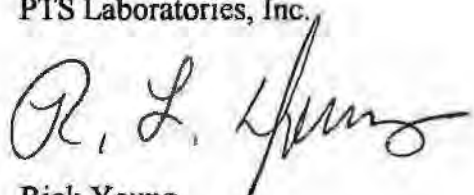
Dear Ms. Valenzuela:

Enclosed is final data for from your Project # 02-02-0045. All analyses were performed by applicable ASTM, EPA or API methodology. Samples will be retained for 30 days before disposal unless other arrangements are made.

We appreciate the opportunity to be of service and trust these data will prove beneficial in the development of this project. Please feel free to call myself or Larry Kunkel, District Manager, should you have any questions or require additional information.

Sincerely,

PTS Laboratories, Inc.



Rick Young  
Laboratory Director

RY/vk

encl.

**PHYSICAL PROPERTIES DATA**

(METHODOLOGY: ASTM D2216, API RP40, ASTM D5084, EPA 9060B)

PROJECT NAME: N/A

PROJECT NO: 02-02-0045

											25.0 PSI CONFINING STRESS	
SAMPLE ID.	DEPTH, ft.	SAMPLE ORIENT. (1)	MOISTURE CONTENT (% wt)	DENSITY		POROSITY, %Vb (2)		PORE FLUID SATURATIONS, % Pv (3)		TOTAL ORGANIC CARBON mg/kg	NATIVE STATE EFFECTIVE PERMEABILITY TO WATER (5) (millidarcy)	NATIVE STATE EFFECTIVE HYDRAULIC CONDUCTIVITY (5) (cm/s)
				BULK (g/cc)	GRAIN (g/cc)	EFFECTIVE	AIR FILLED	WATER	HYDROCARBON			
SB-29-Physical	N/A	V	9.0	1.65	2.72	39.5	24.4	36.2	2.5	500	203	1.90E-04

(1) Sample Orientation: H = horizontal; V = vertical (2) Effective Porosity = no pore fluids in place; all interconnected pore channels; Air Filled = pore channels not occupied by pore fluids  
 (3) Water = 0.9981 g/cc; Hydrocarbon = 0.7500 g/cc (4) Native State = As received with pore fluids in place (5) Permeability to water and conductivity measured at saturated conditions  
 Vb = Bulk Volume, cc; Pv = Pore Volume, cc; ND = Not Detected



[illegible]



**Centrum  
Analytical  
Laboratories, Inc.**

CERTIFIED HAZARDOUS WASTE TESTING MOBILE & IN HOUSE LABORATORIES

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION**

**LABORATORY REPORT FORM**

Laboratory Name: Centrum Analytical Laboratories, Inc.

Address: 1401 Research Park Drive, Suite 100, Riverside, CA 92507

Telephone: (909) 779-0310

**Laboratory Certification**

(ELAP) No.: 2419 Expiration Date: May 2002.

Authorized Signature Name (Print): James M. Reed, Mobile Lab Supervisor

Authorized Signature, Date: *James M. Reed*

Client: Earthtech

Project No: 47127/LAUSD EUMS

Analytical Method:	EPA 502.1	EPA 502.2	EPA 524.1
			EPA 524.2
	EPA 601		EPA 624
	EPA 8010	EPA 8021	EPA 8260B
Other	_____	_____	<u>GCMS</u>
Date Sampled:	_____	_____	<u>01/21/02</u>
Date Received:	_____	_____	<u>01/21/02</u>
Date Reported:	_____	_____	<u>01/21/02</u>
Sample Matrix:	_____	_____	<u>Vapor</u>
Extraction Method:	_____	_____	_____
Extraction Material:	_____	_____	_____

Chain of Custody Received: Yes No

Sample Condition: Samples were received in glass bulbs.

-- Sample headspace description (%)

NA

-- Sample container material:

Glass

(RWQCB LabForm; Ver11/92)



**Centrum  
Analytical  
Laboratories, Inc.**

# **ANALYTICAL TEST RESULTS**

Reporting Unit: µg/L of Air

DATE ANALYZED			01/21/02	01/21/02	01/21/02	01/21/02
DATE EXTRACTED			NA	NA	NA	NA
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			Amb. Blank	M2-881-1	M2-881-2	M2-881-3
CLIENT SAMPLE I.D.			NA	SG-9-10 A	SG-9-10 B	SG-9-10 C
COMPOUND	MDL	EQL				
Carbon Tetrachloride		1.0	ND	ND	ND	ND
Chloroethane		1.0	ND	ND	ND	ND
Chloroform		1.0	ND	ND	ND	ND
Dichlorodifluoromethane		1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)		1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)		1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)		1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane		1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)		1.0	ND	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)		1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)		1.0	ND	ND	ND	ND
Trichloroethylene (TCE)		1.0	ND	ND	ND	ND
Methylene Chloride		1.0	ND	ND	ND	ND
Trichlorofluoromethane		1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane		1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene		1.0	ND	ND	ND	ND
Toluene		2.0	ND	ND	ND	ND
m,p-Xylenes		2.0	ND	ND	ND	ND
o-Xylene		1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	110	104	104	103
Toluene-d8	50	70-130	95	94	98	97
Bromofluorobenzene	50	70-130	97	93	97	95

SPK CONC = Spiking Concentration (<= 5 x PQL); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.



**Centrum  
Analytical  
Laboratories, Inc.**

### **ANALYTICAL TEST RESULTS**

Reporting Unit: µg/L of Air

DATE ANALYZED			01/21/02	01/21/02	01/21/02	01/21/02
DATE EXTRACTED			NA	NA	NA	NA
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			M2-881-4	M2-881-5	M2-881-6	M2-881-7
CLIENT SAMPLE I.D.			SG-8-20	SG-15-10	SG-15-20	SG-15-20 D
COMPOUND	MDL	EQL				
Carbon Tetrachloride		1.0	ND	ND	ND	ND
Chloroethane		1.0	ND	ND	ND	ND
Chloroform		1.0	ND	ND	ND	ND
Dichlorodifluoromethane		1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)		1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)		1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)		1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane		1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)		1.0	ND	1.1	1.3	1.2
1,1,1-Trichloroethane (1,1,1-TCA)		1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)		1.0	ND	ND	ND	ND
Trichloroethylene (TCE)		1.0	ND	ND	ND	ND
Methylene Chloride		1.0	ND	ND	ND	ND
Trichlorofluoromethane		1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane		1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene		1.0	ND	ND	ND	ND
Toluene		2.0	ND	ND	ND	ND
m,p-Xylenes		2.0	ND	ND	ND	ND
o-Xylene		1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	103	105	104	107
Toluene-d8	50	70-130	95	96	94	95
Bromofluorobenzene	50	70-130	94	97	97	98

SPK CONC = Spiking Concentration ( $\leq 5 \times$  PQL); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.





**Centrum  
Analytical  
Laboratories, Inc.**

# **ANALYTICAL TEST RESULTS**

Reporting Unit: µg/L of Air

DATE ANALYZED			01/21/02	01/21/02	01/21/02	01/21/02
DATE EXTRACTED			NA	NA	NA	NA
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			M2-881-8	M2-881-9	M2-881-10	M2-881-11
CLIENT SAMPLE I.D.			SG-11-9	SG-10-10	SG-10-20	SG-8-10
COMPOUND	MDL	EQL				
Carbon Tetrachloride		1.0	ND	ND	ND	ND
Chloroethane		1.0	ND	ND	ND	ND
Chloroform		1.0	ND	ND	ND	ND
Dichlorodifluoromethane		1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)		1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)		1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)		1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane		1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane		1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)		1.0	1.5	ND	1.0	ND
1,1,1-Trichloroethane (1,1,1-TCA)		1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)		1.0	ND	ND	ND	ND
Trichloroethylene (TCE)		1.0	ND	ND	ND	ND
Methylene Chloride		1.0	ND	ND	ND	ND
Trichlorofluoromethane		1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane		1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene		1.0	ND	ND	ND	ND
Toluene		2.0	ND	ND	ND	ND
m,p-Xylenes		2.0	ND	ND	ND	ND
o-Xylene		1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	109	105	110	107
Toluene-d8	50	70-130	96	96	97	96
Bromofluorobenzene	50	70-130	96	95	96	96

SPK CONC = Spiking Concentration (<= 5 x PQL); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.



**Centrum  
Analytical  
Laboratories, Inc.**

# **ANALYTICAL TEST RESULTS**

Reporting Unit: µg/L of Air

DATE ANALYZED			01/21/02	01/21/02	01/21/02	
DATE EXTRACTED			NA	NA	NA	
DILUTION FACTOR			1	1	1	
LAB SAMPLE I.D.			M2-881-12	M2-881-13	M2-882-14	
CLIENT SAMPLE I.D.			SG-8-20	SG-14-20	SG-14-10	
COMPOUND	MDL	EQL				
Carbon Tetrachloride		1.0	ND	ND	ND	
Chloroethane		1.0	ND	ND	ND	
Chloroform		1.0	ND	ND	ND	
Dichlorodifluoromethane		1.0	ND	ND	ND	
1,1-Dichloroethane (1,1-DCA)		1.0	ND	ND	ND	
1,2-Dichloroethane (1,2-DCA)		1.0	ND	ND	ND	
1,1-Dichloroethylene (1,1-DCE)		1.0	ND	ND	ND	
cis-1,2-Dichloroethylene		1.0	ND	ND	ND	
trans-1,2-Dichloroethylene		1.0	ND	ND	ND	
1,1,1,2-Tetrachloroethane		1.0	ND	ND	ND	
1,1,2,2-Tetrachloroethane		1.0	ND	ND	ND	
Tetrachloroethylene (PCE)		1.0	ND	ND	ND	
1,1,1-Trichloroethane (1,1,1-TCA)		1.0	ND	ND	ND	
1,1,2-Trichloroethane (1,1,2-TCA)		1.0	ND	ND	ND	
Trichloroethylene (TCE)		1.0	ND	ND	ND	
Methylene Chloride		1.0	ND	ND	ND	
Trichlorofluoromethane		1.0	ND	ND	ND	
1,1,2-Trichlorotrifluoroethane		1.0	ND	ND	ND	
Vinyl Chloride	0.1	0.4	ND	ND	ND	
Benzene	0.1	0.4	ND	ND	ND	
Ethylbenzene		1.0	ND	ND	ND	
Toluene		2.0	ND	ND	ND	
m,p-Xylenes		2.0	ND	ND	ND	
o-Xylene		1.0	ND	ND	ND	
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	
Dibromofluoromethane	50	70-130	108	109	118	
Toluene-d8	50	70-130	95	95	94	
Bromofluorobenzene	50	70-130	94	93	94	

SPK CONC = Spiking Concentration (<= 5 x PQL); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.

**QA / QC REPORT**

Reporting Unit (Circle One) :  $\mu\text{g/Kg}$   $\mu\text{g/L of air}$

I. Duplicates

DATE PERFORMED: 01/21/02  
 CLEINT SAMPLE I.D.: SG-15-20, SG-15-20 D  
 LAB SAMPLE I.D.: M2-881-6, M2-881-7

ANALYTE	Conc	Conc Dup	RPD		ACP RPD
8260 Compounds					
Tetrachloroethene	1.32	1.17	12%		25

II. Laboratory Control Check Sample

DATE PERFORMED: 01/21/02  
 LAB SAMPLE I.D.: Laboratory Control Sample

ANALYTE	SPK CONC	Conc LCS	% Rec LCS	Conc LCSD	% Rec LCSD	RPD	ACP % LCS	ACP RPD
8260 Compounds								
1,1-Dichloroethylene	20	26.0	130%	23.0	115%	12%	70-130	25
Benzene	20	20.4	102%	18.0	90%	13%	70-130	25
Trichloroethene	20	19.5	98%	17.2	86%	12%	70-130	25
Toluene	20	18.6	93%	16.6	83%	12%	70-130	25
Chlorobenzene	20	21.9	109%	19.1	96%	14%	70-130	25

JT



# Centrum Analytical Laboratories, Inc.

1401 Research Park Drive, Suite 100  
Riverside, CA 92507  
Voice: 909.779.0310 • 800.798.9336  
Fax: 909.779.0344

## Chain of Custody Record

3299 Hill Street, Suite 305  
Signal Hill, CA 90806  
Voice: 562.498.7005  
Fax: 562.498.8617

www.centrum-labs.com

lab@centrum-labs.com

Centrum Job # **M2-881**

Page **1** of **2**

Project No:		Project Name:		Please Circle Analyses Requested												Turn-Around Time		
47127		LAUSD EUMS		8015M: Diesel, Fuel Screen, Carbon Chain	8015M: Gas only	8021B: BTEX/MBE Only	418.1 (TRPH), 413.2, 1664	LAUSD	GC or GCMS Volatiles by 5035*	GCMS: 8260B, 8021B, 624, 524.2	GCMS: MBE Conf. Only, BTEX/Oxygenates Only	GCMS: 8270C, 625	8080: Pesticides, PCBs, Pest/PCB	Metals: Title 22 (CAM), RCRA, PP	pH, TDS, TSS, Conductivity	Flashpoint, Hex Cr	<input type="checkbox"/> 24 Hr. RUSH* <input type="checkbox"/> 48 Hr. RUSH* <input type="checkbox"/> Normal TAT	
Project Manager: STEVE WILLIAMS		Phone: 562 451-2272 Fax: 562 751-2086															*Requires PRIOR approval, additional charges apply	
Client Name: EARTH TECH		Address: 100 W. BROADWAY STE 240 LONG BEACH CA 90802																
Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type											Remarks/Special Instructions	
1	SG-9-10 A	1/21/02	0820	gas		BULB											2 PURGE VOLUMES	
2	SG-9-10 B		0812														4 " "	
3	SG-9-10 C		0819														6 " "	
4	SG-9-20		0934															
5	SG-15-10		0945															
6	SG-15-20		0959															
7	SG-15-20 D		0958														DUPLICATE	
8	SG-11-9		1047															
9	SG-10-10		1121															
10	SG-10-20		1128															
1) Relinquished by: (Signature)		Date:	Time:	3) Relinquished by:		Date:	Time:	To be completed by Laboratory personnel: Samples chilled? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> From Field Custody seals? <input type="checkbox"/> Yes <input type="checkbox"/> No All sample containers intact? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Courier <input type="checkbox"/> UPS/Fed Ex <input type="checkbox"/> Hand carried										Sample Disposal <input type="checkbox"/> Client will pick up <input type="checkbox"/> Return to client <input type="checkbox"/> Lab disposal
2) Received by: (Signature)		Date:	Time:	4) Received by:		Date:	Time:											
The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.		5) Relinquished by:		6) Received for Laboratory by:		Date:	Time:											Sample Locator No.





# Centrum Analytical Laboratories, Inc.

1401 Research Park Drive, Suite 100  
Riverside, CA 92507  
Voice: 909.779.0310 • 800.798.9336  
Fax: 909.779.0344

## Chain of Custody Record

3299 Hill Street, Suite 305  
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Fax: 562.498.8617

www.centrum-labs.com

lab@centrum-labs.com

Centrum Job # 1012-881

Page 2 of 2

Project No:		Project Name:		Please Circle Analyses Requested												Turn-Around Time							
47127		LAUSD EVMS														<input type="checkbox"/> 24 Hr. RUSH* <input type="checkbox"/> 48 Hr. RUSH* <input type="checkbox"/> Normal TAT							
Project Manager:		Phone:		Fax:																			
STEVE WILLIAMS		(562) 951-2272		(562) 951-2086																			
Client Name:		Address:																					
(Report and Billing) EARTH TECH		(Report and Billing) 100 W. BROADWAY STE 240 LONG BEACH CA 90802																					
Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type	8015M: Diesel, Fuel Screen, Carbon Chain	8015M: Gas only	8021B: BTEX/MBE Only	418.1 (TRPH), 413.2, 1684	LAUSD	GC or GCMS Volatiles by 5035*	GCMS: 8260B, 8021B, 624, 524.2	GCMS: MIBE Conf. Only, BTEX/Oxygenates Only	GCMS: 8270C, 625	8080: Pesticides, PCBs, Pest/PCB	Motals: Title 22 (CAM), RCRA, PP	pH, TDS, TSS, Conductivity	Flashpoint, Hex Cr	Remarks/Special Instructions			
11	SG-8-10	1/21/02	1245	VAPOR		BULB					X												
12	SG-8-20	1	1253																				
13	SG-14-20	1	1330																				
14	SG-14-10	1	1300																				
1) Relinquished by: (Sampler's Signature)		Date:	Time:	3) Relinquished by:		Date:	Time:	To be completed by Laboratory personnel:												Sample Disposal			
2) Received by:		Date:	Time:	4) Received by:		Date:	Time:	Samples chilled? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> From Field Custody seals? <input type="checkbox"/> Yes <input type="checkbox"/> No All sample containers intact? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Courier <input type="checkbox"/> UPS/Fed Ex <input type="checkbox"/> Hand carried												<input type="checkbox"/> Client will pick up <input type="checkbox"/> Return to client <input type="checkbox"/> Lab disposal			
The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.		5) Relinquished by:		Date:	Time:	6) Received for Laboratory by:		Date:	Time:														
Laboratory Notes:																				Sample Locator No.			



**Centrum  
Analytical  
Laboratories, Inc.**

CERTIFIED HAZARDOUS WASTE TESTING MOBILE & IN HOUSE LABORATORIES

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION**

**LABORATORY REPORT FORM**

Laboratory Name: Centrum Analytical Laboratories, Inc.

Address: 1401 Research Park Drive, Suite 100, Riverside, CA 92507

Telephone: (909) 779-0310

Laboratory Certification

(ELAP) No.: 2419 Expiration Date: May 2002.

Authorized Signature Name (Print): James M. Reed, Mobile Lab Supervisor

Authorized Signature, Date: *James M. Reed*

Client: Earthtech

Project No: 47127/LAUSD EUMS

Analytical Method:	EPA 502.1	EPA 502.2	EPA 524.1
			EPA 524.2
	EPA 601		EPA 624
	EPA 8010	EPA 8021	EPA 8260B

Other

GCMS

Date Sampled: 01/22/02

Date Received: 01/22/02

Date Reported: 01/22/02

Sample Matrix: Vapor

Extraction Method:

Extraction Material:

Chain of Custody Received: **Yes** **No**

Sample Condition: Samples were received in glass bulbs.

-- Sample headspace description (%) NA

-- Sample container material: Glass

(RWQCB LabForm; Ver11/92)

909•779•0310 OR 800•798•9336 fax 909•779•0344  
www.centrum-labs.com 1401 Research Park Drive, Suite 100, Riverside, CA 92507

### **ANALYTICAL TEST RESULTS**

Reporting Unit: µg/L of Air

DATE ANALYZED			01/22/02	01/22/02	01/22/02	01/22/02
DATE EXTRACTED			NA	NA	NA	NA
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			Amb. Blank	M2-882-1	M2-882-2	M2-882-3
CLIENT SAMPLE I.D.			NA	SG-7-10	SG-7-20	SG-1-10
COMPOUND	MDL	EQL				
Carbon Tetrachloride		1.0	ND	ND	ND	ND
Chloroethane		1.0	ND	ND	ND	ND
Chloroform		1.0	ND	ND	ND	ND
Dichlorodifluoromethane		1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)		1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)		1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)		1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane		1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)		1.0	ND	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)		1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)		1.0	ND	ND	ND	ND
Trichloroethylene (TCE)		1.0	ND	ND	ND	ND
Methylene Chloride		1.0	ND	ND	ND	ND
Trichlorofluoromethane		1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane		1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene		1.0	ND	ND	ND	ND
Toluene		2.0	ND	ND	ND	ND
m,p-Xylenes		2.0	ND	ND	ND	ND
o-Xylene		1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	106	101	105	108
Toluene-d8	50	70-130	96	93	96	95
Bromofluorobenzene	50	70-130	95	93	95	94

SPK CONC = Spiking Concentration (<= 5 x PQL); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.

### **ANALYTICAL TEST RESULTS**

Reporting Unit: µg/L of Air

DATE ANALYZED			01/22/02	01/22/02	01/22/02	01/22/02
DATE EXTRACTED			NA	NA	NA	NA
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			M2-882-4	M2-882-5	M2-882-6	M2-882-7
CLIENT SAMPLE I.D.			SG-1-10 D	SG-1-20	SG-2-10	SG-2-20
COMPOUND	MDL	EQL				
Carbon Tetrachloride		1.0	ND	ND	ND	ND
Chloroethane		1.0	ND	ND	ND	ND
Chloroform		1.0	ND	ND	ND	ND
Dichlorodifluoromethane		1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)		1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)		1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)		1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane		1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)		1.0	ND	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)		1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)		1.0	ND	ND	ND	ND
Trichloroethylene (TCE)		1.0	ND	ND	ND	ND
Methylene Chloride		1.0	ND	ND	ND	ND
Trichlorofluoromethane		1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane		1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene		1.0	ND	ND	ND	ND
Toluene		2.0	ND	ND	ND	ND
m,p-Xylenes		2.0	ND	ND	ND	ND
o-Xylene		1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	108	111	105	107
Toluene-d8	50	70-130	94	94	96	96
Bromofluorobenzene	50	70-130	93	93	95	93

SPK CONC = Spiking Concentration ( $\leq 5 \times \text{PQL}$ ); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.



# **ANALYTICAL TEST RESULTS**

Reporting Unit: µg/L of Air

DATE ANALYZED			01/22/02	01/22/02	01/22/02	01/22/02
DATE EXTRACTED			NA	NA	NA	NA
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			M2-882-8	M2-882-9	M2-882-10	M2-882-11
CLIENT SAMPLE I.D.			SG-3-10	SG-3-20	SG-4-10	SG-4-20
COMPOUND	MDL	EQL				
Carbon Tetrachloride		1.0	ND	ND	ND	ND
Chloroethane		1.0	ND	ND	ND	ND
Chloroform		1.0	ND	ND	ND	ND
Dichlorodifluoromethane		1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)		1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)		1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)		1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane		1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)		1.0	ND	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)		1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)		1.0	ND	ND	ND	ND
Trichloroethylene (TCE)		1.0	ND	ND	ND	ND
Methylene Chloride		1.0	ND	ND	ND	ND
Trichlorofluoromethane		1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane		1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene		1.0	ND	ND	ND	ND
Toluene		2.0	ND	ND	ND	ND
m,p-Xylenes		2.0	ND	ND	ND	ND
o-Xylene		1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	107	120	112	115
Toluene-d8	50	70-130	96	97	96	95
Bromofluorobenzene	50	70-130	95	95	94	94

SPK CONC = Spiking Concentration (<= 5 x PQL); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit

### ANALYTICAL TEST RESULTS

Reporting Unit: µg/L of Air

DATE ANALYZED			01/22/02	01/22/02	01/22/02	01/22/02
DATE EXTRACTED			NA	NA	NA	NA
DILUTION FACTOR			- 1	1	1	1
LAB SAMPLE I.D.			M2-882-12	M2-882-13	M2-882-14	M2-882-15
CLIENT SAMPLE I.D.			SG-5-10	SG-5-20	SG-6-10	SG-6-20
COMPOUND	MDL	EQL				
Carbon Tetrachloride		1.0	ND	ND	ND	ND
Chloroethane		1.0	ND	ND	ND	ND
Chloroform		1.0	ND	ND	ND	ND
Dichlorodifluoromethane		1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)		1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)		1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)		1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane		1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)		1.0	ND	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)		1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)		1.0	ND	ND	ND	ND
Trichloroethylene (TCE)		1.0	ND	ND	ND	ND
Methylene Chloride		1.0	ND	ND	ND	ND
Trichlorofluoromethane		1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane		1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene		1.0	ND	ND	ND	ND
Toluene		2.0	ND	ND	ND	ND
m,p-Xylenes		2.0	ND	ND	ND	ND
o-Xylene		1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	113	114	119	113
Toluene-d8	50	70-130	97	94	96	95
Bromofluorobenzene	50	70-130	92	94	96	96

SPK CONC = Spiking Concentration ( $\leq 5 \times \text{PQL}$ ); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.

# **ANALYTICAL TEST RESULTS**

Reporting Unit: µg/L of Air

<b>DATE ANALYZED</b>			01/22/02			
<b>DATE EXTRACTED</b>			NA			
<b>DILUTION FACTOR</b>			- 1			
<b>LAB SAMPLE I.D.</b>			M2-882-16			
<b>CLIENT SAMPLE I.D.</b>			SG-6-20 D			
<b>COMPOUND</b>	<b>MDL</b>	<b>EQL</b>				
Carbon Tetrachloride		1.0	ND			
Chloroethane		1.0	ND			
Chloroform		1.0	ND			
Dichlorodifluoromethane		1.0	ND			
1,1-Dichloroethane (1,1-DCA)		1.0	ND			
1,2-Dichloroethane (1,2-DCA)		1.0	ND			
1,1-Dichloroethylene (1,1-DCE)		1.0	ND			
cis-1,2-Dichloroethylene		1.0	ND			
trans-1,2-Dichloroethylene		1.0	ND			
1,1,1,2-Tetrachloroethane		1.0	ND			
1,1,2,2-Tetrachloroethane		1.0	ND			
Tetrachloroethylene (PCE)		1.0	ND			
1,1,1-Trichloroethane (1,1,1-TCA)		1.0	ND			
1,1,2-Trichloroethane (1,1,2-TCA)		1.0	ND			
Trichloroethylene (TCE)		1.0	ND			
Methylene Chloride		1.0	ND			
Trichlorofluoromethane		1.0	ND			
1,1,2-Trichlorotrifluoroethane		1.0	ND			
Vinyl Chloride	0.1	0.4	ND			
Benzene	0.1	0.4	ND			
Ethylbenzene		1.0	ND			
Toluene		2.0	ND			
m,p-Xylenes		2.0	ND			
o-Xylene		1.0	ND			
<b>SURROGATE</b>	<b>SPK CONC</b>	<b>ACP%</b>	<b>%REC</b>			
Dibromofluoromethane	50	70-130	112			
Toluene-d8	50	70-130	95			
Bromofluorobenzene	50	70-130	94			

SPK CONC = Spiking Concentration (<= 5 x PQL); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.



**Centrum  
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**QA / QC REPORT**

Reporting Unit (Circle One) :  $\mu\text{g/Kg}$   $\mu\text{g/L of air}$

I. Laboratory Control Check Sample

DATE PERFORMED: 01/22/02

LAB SAMPLE I.D.: Laboratory Control Sample

ANALYTE	SPK CONC	Conc LCS	% Rec LCS	Conc LCSD	% Rec LCSD	RPD	ACP % LCS	ACP RPD
8260 Compounds								
1,1-Dichloroethylene	20	23.5	118%	24.8	124%	5%	70-130	25
Benzene	20	18.1	91%	18.9	94%	4%	70-130	25
Trichloroethene	20	17.0	85%	17.9	90%	5%	70-130	25
Toluene	20	16.6	83%	17.3	86%	4%	70-130	25
Chlorobenzene	20	19.5	98%	20.1	101%	3%	70-130	25

JT





**1401 Research Park Drive, Suite 100  
Riverside, CA 92507  
Voice: 909.779.0310 • 800.798.9336  
Fax: 909.779.0344**

Centrum Job # M2-882

**3299 Hill Street, Suite 305  
Signal Hill, CA 90806  
Voice: 562.498.7005  
Fax: 562.498.8617**

lab@centrum-labs.com

Page 1 of 2

White Copy - Original (Accompanies Samples)

Yellow Copy - Centrum Files

**Pink Copy - Centrum duplicate**

Gold Copy - Client Copy



# Centrum Analytical Laboratories, Inc.

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Riverside, CA 92507  
Voice: 909.779.0310 • 800.798.9336  
Fax: 909.779.0344

## Chain of Custody Record

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lab@centrum-labs.com

Centrum Job # **M2-882**

Page **2** of **2**

Project No: <b>47127</b>			Project Name: <b>LAUSD EUMS</b>			Please Circle Analyses Requested												Turn-Around Time <input type="checkbox"/> 24 Hr. RUSH* <input type="checkbox"/> 48 Hr. RUSH* <input type="checkbox"/> Normal TAT  *Requires PRIOR approval, additional charges apply Requested due date: _____							
Project Manager: <b>STEVE WILLIAMS</b>			Phone: <b>562 951 2272</b>			Fax: <b>562 951 2086</b>			8015M: Diesel, Fuel Screen, Carbon Chain 8015M: Gas only 8021B: BTEX/MIBE Only 418.1 (TRPH), 413.2, 1664 <b>LAUSD</b> GC or GCMS Volatiles by 5035* GCMS: 8260B, 8021B, 624, 524.2 GCMS: MIBE Conf. Only, BTEX/Oxygenates Only GCMS: 8270C, 625 8080: Pesticides, PCBs, Pest/PCB Metals: Title 22 (CAM), RCRA, PP pH, TDS, TSS, Conductivity Flashpoint, Hex Cr																
Client Name: (Report and Billing) <b>EARTH TECH</b>			Address: (Report and Billing) <b>100 W. BROADWAY, STE 240 LONG BEACH, CA 90802</b>															Remarks/Special Instructions							
Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type													DUPLICATE						
11	SG-4-20	4/22/02	1038	VAPOR		BULB																			
12	SG-5-10	1	1106	1		1																			
13	SG-5-20	1	1115	1		1																			
14	SG-6-10	1	1155	1		1																			
15	SG-6-20	1	1210	1		1																			
16	SG-6-20 D	1	1210	1		1																			
1) Relinquished by: (Sampler's Signature) <i>[Signature]</i>						Date: 4/22/02		Time: 1230		3) Relinquished by:						Date:		Time:		To be completed by Laboratory personnel: Samples chilled? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> From Field Custody seals? <input type="checkbox"/> Yes <input type="checkbox"/> No All sample containers intact? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Courier <input type="checkbox"/> UPS/Fed Ex <input type="checkbox"/> Hand carried				Sample Disposal <input type="checkbox"/> Client will pick up <input type="checkbox"/> Return to client <input type="checkbox"/> Lab disposal	
2) Received by: <i>[Signature]</i>						Date: 4/22/02		Time: 1230		4) Received by:						Date:		Time:							
The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.						5) Relinquished by:						Date:		Time:											
Laboratory Notes:						6) Received for Laboratory by:						Date:		Time:		Sample Locator No.									



**Centrum  
Analytical  
Laboratories, Inc.**

CERTIFIED HAZARDOUS WASTE TESTING MOBILE & IN HOUSE LABORATORIES

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION**

**LABORATORY REPORT FORM**

Laboratory Name: Centrum Analytical Laboratories, Inc.

Address: 1401 Research Park Drive, Suite 100, Riverside, CA 92507

Telephone: (909) 779-0310

**Laboratory Certification**

(ELAP) No.: 2419 Expiration Date: May 2002.

Authorized Signature Name (Print): James M. Reed, Mobile Lab Supervisor

Authorized Signature, Date: 

Client: Earthtech

Project No: 47127/LAUSD EUMS

Analytical Method:	EPA 502.1	EPA 502.2	EPA 524.1
			EPA 524.2
	EPA 601		EPA 624
	EPA 8010	EPA 8021	EPA 8260B

Other

GCMS

Date Sampled: 01/23/02

Date Received: 01/23/02

Date Reported: 01/23/02

Sample Matrix: Vapor

Extraction Method:

Extraction Material:

Chain of Custody Received: Yes No

Sample Condition: Samples were received in glass bulbs.

-- Sample headspace description (%) NA

-- Sample container material: Glass

(RWQCB LabForm; Ves11/92)

909•779•0310 OR 800•798•9336 fax 909•779•0344  
www.centrum-labs.com 1401 Research Park Drive, Suite 100, Riverside, CA 92507



**Centrum  
Analytical  
Laboratories, Inc.**

# **ANALYTICAL TEST RESULTS**

Reporting Unit: µg/L of Air

DATE ANALYZED			01/23/02	01/23/02	01/23/02	01/23/02
DATE EXTRACTED			NA	NA	NA	NA
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			Amb. Blank	M2-883-1	M2-883-2	M2-883-3
CLIENT SAMPLE I.D.			NA	SG-13-10	SG-13-20	SG-16-10
COMPOUND	MDL	EQL				
Carbon Tetrachloride		1.0	ND	ND	ND	ND
Chloroethane		1.0	ND	ND	ND	ND
Chloroform		1.0	ND	ND	ND	ND
Dichlorodifluoromethane		1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)		1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)		1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)		1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane		1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)		1.0	ND	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)		1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)		1.0	ND	ND	ND	ND
Trichloroethylene (TCE)		1.0	ND	ND	ND	ND
Methylene Chloride		1.0	ND	ND	ND	ND
Trichlorofluoromethane		1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane		1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene		1.0	ND	ND	ND	ND
Toluene		2.0	ND	ND	ND	ND
m,p-Xylenes		2.0	ND	ND	ND	ND
o-Xylene		1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	105	108	108	105
Toluene-d8	50	70-130	97	97	97	96
Bromofluorobenzene	50	70-130	94	92	92	92

SPK CONC = Spiking Concentration (<= 5 x PQL); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.





**Centrum  
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# **ANALYTICAL TEST RESULTS**

Reporting Unit: µg/L of Air

DATE ANALYZED			01/23/02	01/23/02	01/23/02	01/23/02
DATE EXTRACTED			NA	NA	NA	NA
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			M2-883-4	M2-883-5	M2-883-6	M2-883-7
CLIENT SAMPLE I.D.			SG-16-20	SG-12-10	SG-12-20	SG-17-10
COMPOUND	MDL	EQL				
Carbon Tetrachloride		1.0	ND	ND	ND	ND
Chloroethane		1.0	ND	ND	ND	ND
Chloroform		1.0	ND	ND	ND	ND
Dichlorodifluoromethane		1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)		1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)		1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)		1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane		1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)		1.0	ND	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)		1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)		1.0	ND	ND	ND	ND
Trichloroethylene (TCE)		1.0	ND	ND	ND	ND
Methylene Chloride		1.0	ND	ND	ND	ND
Trichlorofluoromethane		1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane		1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene		1.0	ND	ND	ND	ND
Toluene		2.0	ND	ND	ND	ND
m,p-Xylenes		2.0	ND	ND	ND	ND
o-Xylene		1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	105	109	115	113
Toluene-d8	50	70-130	95	96	96	95
Bromofluorobenzene	50	70-130	93	91	93	93

SPK CONC = Spiking Concentration ( $\leq 5 \times \text{PQL}$ ); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit



**Centrum  
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Laboratories, Inc.**

# **ANALYTICAL TEST RESULTS**

Reporting Unit: µg/L of Air

DATE ANALYZED			01/23/02	01/23/02	01/23/02	01/23/02
DATE EXTRACTED			NA	NA	NA	NA
DILUTION FACTOR			- 1	1 *	1	1
LAB SAMPLE I.D.			M2-883-8	M2-883-9	M2-883-10	M2-883-11
CLIENT SAMPLE I.D.			SG-17-20	SG-18-10	SG-18-18	SG-21-10
COMPOUND	MDL	EQL				
Carbon Tetrachloride		1.0	ND	ND	ND	ND
Chloroethane		1.0	ND	ND	ND	ND
Chloroform		1.0	ND	ND	ND	ND
Dichlorodifluoromethane		1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)		1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)		1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)		1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane		1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)		1.0	ND	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)		1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)		1.0	ND	ND	ND	ND
Trichloroethylene (TCE)		1.0	ND	ND	ND	ND
Methylene Chloride		1.0	ND	ND	ND	ND
Trichlorofluoromethane		1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane		1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene		1.0	ND	ND	ND	ND
Toluene		2.0	ND	ND	ND	ND
m,p-Xylenes		2.0	ND	ND	ND	ND
o-Xylene		1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	114	108	102	107
Toluene-d8	50	70-130	91	90	91	91
Bromofluorobenzene	50	70-130	97	99	99	98

SPK CONC = Spiking Concentration (<= 5 x PQL); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.

\* Tracer, hexane, was detected in sample.

# **ANALYTICAL TEST RESULTS**

Reporting Unit: µg/L of Air

DATE ANALYZED			01/23/02	01/23/02	01/23/02	01/23/02
DATE EXTRACTED			NA	NA	NA	NA
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			M2-883-12	M2-883-13	M2-883-14	M2-883-15
CLIENT SAMPLE I.D.			SG-21-20	SG-20-10	SG-20-20	SG-19-10
COMPOUND	MDL	EQL				
Carbon Tetrachloride		1.0	ND	ND	ND	ND
Chloroethane		1.0	ND	ND	ND	ND
Chloroform		1.0	ND	ND	ND	ND
Dichlorodifluoromethane		1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)		1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)		1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)		1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene		1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane		1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)		1.0	ND	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)		1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)		1.0	ND	ND	ND	ND
Trichloroethylene (TCE)		1.0	ND	ND	ND	ND
Methylene Chloride		1.0	ND	ND	ND	ND
Trichlorofluoromethane		1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane		1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene		1.0	ND	ND	ND	ND
Toluene		2.0	ND	ND	ND	ND
m,p-Xylenes		2.0	ND	ND	ND	ND
o-Xylene		1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	106	107	106	117
Toluene-d8	50	70-130	91	91	91	95
Bromofluorobenzene	50	70-130	99	99	99	95

SPK CONC = Spiking Concentration (<= 5 x PQL); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.



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### **ANALYTICAL TEST RESULTS**

Reporting Unit:  $\mu\text{g/L}$  of Air

DATE ANALYZED			01/23/02	01/23/02	01/23/02	
DATE EXTRACTED			NA	NA	NA	
DILUTION FACTOR			1	1	1	
LAB SAMPLE I.D.			M2-883-16	M2-883-17	M2-883-18	
CLIENT SAMPLE I.D.			SG-19-10 D	SG-19-20	SG-18-10 R	
COMPOUND	MDL	EQL				
Carbon Tetrachloride		1.0	ND	ND	ND	
Chloroethane		1.0	ND	ND	ND	
Chloroform		1.0	ND	ND	ND	
Dichlorodifluoromethane		1.0	ND	ND	ND	
1,1-Dichloroethane (1,1-DCA)		1.0	ND	ND	ND	
1,2-Dichloroethane (1,2-DCA)		1.0	ND	ND	ND	
1,1-Dichloroethylene (1,1-DCE)		1.0	ND	ND	ND	
cis-1,2-Dichloroethylene		1.0	ND	ND	ND	
trans-1,2-Dichloroethylene		1.0	ND	ND	ND	
1,1,1,2-Tetrachloroethane		1.0	ND	ND	ND	
1,1,2,2-Tetrachloroethane		1.0	ND	ND	ND	
Tetrachloroethylene (PCE)		1.0	ND	ND	ND	
1,1,1-Trichloroethane (1,1,1-TCA)		1.0	ND	ND	ND	
1,1,2-Trichloroethane (1,1,2-TCA)		1.0	ND	ND	ND	
Trichloroethylene (TCE)		1.0	ND	ND	ND	
Methylene Chloride		1.0	ND	ND	ND	
Trichlorofluoromethane		1.0	ND	ND	ND	
1,1,2-Trichlorotrifluoroethane		1.0	ND	ND	ND	
Vinyl Chloride	0.1	0.4	ND	ND	ND	
Benzene	0.1	0.4	ND	ND	ND	
Ethylbenzene		1.0	ND	ND	ND	
Toluene		2.0	ND	ND	ND	
m,p-Xylenes		2.0	ND	ND	ND	
o-Xylene		1.0	ND	ND	ND	
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	
Dibromofluoromethane	50	70-130	116	118	111	
Toluene-d8	50	70-130	96	95	97	
Bromofluorobenzene	50	70-130	94	93	91	

SPK CONC = Spiking Concentration ( $\leq 5 \times \text{PQL}$ ); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.



**QA / QC REPORT**

Reporting Unit (Circle One) :  $\mu\text{g/Kg}$   $\mu\text{g/L of air}$

I. Laboratory Control Check Sample

DATE PERFORMED: 01/23/02

LAB SAMPLE I.D.: Laboratory Control Sample

ANALYTE	SPK CONC	Conc LCS	% Rec LCS	Conc LCSD	% Rec LCSD	RPD	ACP % LCS	ACP RPD
8260 Compounds								
1,1-Dichloroethylene	20	24.1	120%	23.3	116%	3%	70-130	25
Benzene	20	18.2	91%	18.1	91%	0%	70-130	25
Trichloroethene	20	17.3	87%	17.0	85%	2%	70-130	25
Toluene	20	16.6	83%	16.7	84%	1%	70-130	25
Chlorobenzene	20	20.1	100%	20.1	101%	0%	70-130	25

JT



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Centrum Job # **1012-883**

Page **1** of **2**

Project No:		Project Name:		Please Circle Analyses Requested												Turn-Around Time					
47127		LAUSD EUMS														<input type="checkbox"/> 24 Hr. RUSH* <input type="checkbox"/> 48 Hr. RUSH* <input type="checkbox"/> Normal TAT					
Project Manager:		Phone:		Fax:														*Requires PRIOR approval, additional charges apply  Requested due date: _____			
STEVE WILLIAMS		562 951 2272		562 951 2086																	
Client Name:		Address:																			
(Report and Billing)		(Report and Billing)		(Report and Billing)																	
EARTH TECH		100 W. BROADWAY, STE. 240		LONG BEACH, CA 90802																	
Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type	8015M: Diesel, Fuel Screen, Carbon Chain	8015M: Gas only	8021B: BTEX/MBE Only	418.1 (TRPH), 413.2, 1664	LAUSD	GC or GCMS Volatiles by 5035*	GCMS: 8260B, 8021B, 624, 524.2	GCMS: MIBE Conf. Only, BTEX/Oxygenates Only	GCMS: 8270C, 625	8080: Pesticides, PCBs, Pest/PCB	Metals: Title 22 (CAM), RCRA, PP	pH, TDS, TSS, Conductivity	Flashpoint, Hex Cr	Remarks/Special Instructions	
1	SG-13-10	1/23/02	0712	VAPOR		BULB					X										
2	SG-13-20		0719																		
3	SG-16-10		0745																		
4	SG-16-20		0753																		
5	SG-12-10		0830																		
6	SG-12-20		0838																		
7	SG-17-10		0928																		
8	SG-17-20		0935																		
9	SG-18-10		1010																		
10	SG-18-20		1028																		
1) Relinquished by: (Sampler's Signature)		Date:	Time:	3) Relinquished by:		Date:	Time:	To be completed by Laboratory personnel:  Samples chilled? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> From Field Custody seals? <input type="checkbox"/> Yes <input type="checkbox"/> No All sample containers intact? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Courier <input type="checkbox"/> UPS/Fed Ex <input type="checkbox"/> Hand carried												Sample Disposal <input type="checkbox"/> Client will pick up <input type="checkbox"/> Return to client <input type="checkbox"/> Lab disposal	
2) Received by:		Date:	Time:	4) Received by:		Date:	Time:														
John Pangelino		1/23/02	1440																		
The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.		5) Relinquished by:		Date:	Time:																
		6) Received for Laboratory by:		Date:	Time:																
Laboratory Notes:																				Sample Locator No.	



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Centrum Job # **141L-883**

Page 2 of 2

Project No: <b>47127</b>		Project Name: <b>LAUSD RUMS</b>		Please Circle Analyses Requested												Turn-Around Time <input type="checkbox"/> 24 Hr. RUSH* <input type="checkbox"/> 48 Hr. RUSH* <input type="checkbox"/> Normal TAT  *Requires PRIOR approval, additional charges apply Requested due date: _____					
Project Manager: <b>STEVE WILLIAMS</b>		Phone: <b>562 951 2272</b>		Fax: <b>562 951 2086</b>		8015M: Diesel, Fuel Screen, Carbon Chain 8015M: Gas only 8021B: BTEX/MBE Only 418.1 (TRPH), 413.2, 1664 <b>LAUSD</b> GC or GCMS Volatiles by 5035* GCMS: 8260B, 8021B, 624, 524.2 GCMS: MIBE Conf. Only, BTEX/Oxygenates Only GCMS: 8270C, 625 8080: Pesticides, PCBs, Pest/PCB Metals: Title 22 (CAM), RCRA, PP pH, TDS, TSS, Conductivity Flashpoint, Hex Cr															
Client Name: (Report and Billing) <b>EARTH TECH</b>		Address: (Report and Billing) <b>100 W. BROADWAY, STE 240 LONG BEACH, CA 90802</b>		Containers: # and type <b>BULB</b>														Remarks/Special Instructions          <b>DUPLICATE</b>  <b>RESAMPLE</b>			
Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location																
11	SG-21-10	1/23/02	1055	VAPOR																	
12	SG-21-20		1112																		
13	SG-20-10		1239																		
14	SG-20-20		1248																		
15	SG-19-10		1305																		
16	SG-19-10D		1305																		
17	SG-19-20		1315																		
18	SG-18-10R		1330																		
1) Relinquished by: (Sampler's Signature) <i>[Signature]</i>		Date: 1/23/02	Time: 1440	3) Relinquished by:		Date:	Time:	To be completed by Laboratory personnel: Samples chilled? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> From Field Custody seals? <input type="checkbox"/> Yes <input type="checkbox"/> No All sample containers intact? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Courier <input type="checkbox"/> UPS/Fed Ex <input type="checkbox"/> Hand carried												Sample Disposal <input type="checkbox"/> Client will pick up <input type="checkbox"/> Return to client <input type="checkbox"/> Lab disposal	
2) Received by: <i>[Signature]</i>		Date: 1/23/02	Time: 1440	4) Received by:		Date:	Time:														
The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.				5) Relinquished by:		Date:	Time:														
				6) Received for Laboratory by:		Date:	Time:														
Laboratory Notes:														Sample Locator No.							

## **APPENDIX E**

### **JOHNSON AND ETTINGER SOIL SCREEN MODEL RESULTS AND MAXIMUM CONCENTRATIONS**



**JOHNSON AND ETTINGER SOIL SCREEN MODEL  
USING 95% UCL**

DTSC/HERD 12/1/01

## Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_g$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_g$ (ppmv)	Chemical
75718	4.85E+02			Dichlorodifluoromethane

ENTER Depth below grade to bottom of enclosed space floor, $L_e$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^3$ )
15	609.6	20.2	LS		

ENTER Vadose zone soil dry bulk density, $P_s^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
1.48	0.457	0.204

ENTER Averaging time for carcinogens, $AT_C$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, H (atm·m <sup>3</sup> /mol)	Henry's law constant reference temperature, $T_R$ (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{vb}$ (cal/mol)	Normal boiling point, $T_b$ (°K)	Critical temperature, $T_c$ (°K)	Unit risk factor, URF (µg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
8.00E-02	1.10E-05	7.24E-06	25	5,246	243.00	370.00	0.0E+00	2.0E-01	120.00

END

# INTERMEDIATE CALCULATIONS SHEET

Source-building separation, $L_r$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_m$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor-wall seam perimeter, $X_{crack}$ (cm)	Soil gas conc., ( $\mu\text{g}/\text{m}^3$ )	Bldg. ventilation rate, $Q_{building}$ (cm <sup>3</sup> /s)
594.8	0.253	0.380	1.85E-08	0.717	1.18E-08	3,844	4.65E+02	5.63E+04

Area of enclosed space below grade, $A_g$ (cm <sup>2</sup> )	Crack-to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{vgs}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{gs}$ (atm·m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H'_{gs}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{gs}$ (g/cm·s)	Vadose zone effective diffusion coefficient, $D_{eff}^v$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.16E-04	15	4,352	6.42E-06	2.67E-04	1.79E-04	4.93E-03	594.6

Convection path length, $L_c$ (cm)	Source vapor conc., $C_{source}$ ( $\mu\text{g}/\text{m}^3$ )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{avg}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}^{eff}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ ( $\mu\text{g}/\text{m}^3$ )
15	4.65E+02	0.10	1.12E+01	4.93E-03	3.84E+02	4.33E+38	8.08E-05	3.76E-02

Unit risk factor, URF ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )
NA	2.0E-01
END	



# RESULTS SHEET

## INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unless)
--	--

NA	1.85-04
----	---------

## MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END

DTSC/HEAD 12/1/01

## Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_g$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_g$ (ppmv)	Chemical
75694	4.55E+02			Trichlorofluoromethane

MORE  
↓

ENTER Depth below grade to bottom of enclosed space floor, $L_f$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	609.5	20.2	LS		

MORE  
↓

ENTER Vadose zone soil dry bulk density, $\rho_b^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
1.48	0.457	0.204

MORE  
↓

ENTER Averaging time for carcinogens, $AT_c$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{nc}$ (yrs)	ENTER Exposure duration, $ED$ (yrs)	ENTER Exposure frequency, $EF$ (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ [cm <sup>2</sup> /s]	Diffusivity in water, $D_w$ [cm <sup>2</sup> /s]	Henry's law constant at reference temperature, H [atm·m <sup>3</sup> /mol]	Henry's law constant reference temperature, T <sub>H</sub> [°C]	Enthalpy of vaporization at the normal boiling point, ΔH <sub>vb</sub> [cal/mol]	Normal boiling point, T <sub>B</sub> [°K]	Critical temperature, T <sub>C</sub> [°K]	Unit risk factor, URF [μg/m <sup>3</sup> ] <sup>-1</sup>	Reference conc., RfC [mg/m <sup>3</sup> ]	Molecular weight, MW [g/mol]
8.70E-02	1.30E-05	3.08E-05	25	6,168	296.87	471.15	0.0E+00	7.0E-01	137.40

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, $L_T$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_{sa}$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor- wall seam perimeter, $X_{max}$ (cm)	Soil gas conc., $\mu g/m^3$	Bldg. ventilation rate, $Q_{building}$ (cm <sup>3</sup> /s)
594.6	0.253	0.380	1.85E-08	0.717	1.18E-08	3.844	4.65E+02	5.83E+04

Area of enclosed space below grade, $A_e$ (cm <sup>2</sup> )	Crack- to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (atm-m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H'_{TS}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cm-s)	Vadose zone effective diffusion coefficient, $D_{eff}^v$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.16E-04	15	6.211	2.59E-05	1.08E-03	1.79E-04	4.58E-03	594.6

Convection path length, $L_c$ (cm)	Source vapor conc., $C_{source}$ ( $\mu g/m^3$ )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{soil}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $\exp(Pe)^{1/2}$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ ( $\mu g/m^3$ )
15	4.65E+02	0.10	1.12E+01	4.58E-03	3.84E+02	4.49E+41	7.73E-05	3.59E-02

Unit risk factor, URF ( $\mu g/m^3$ ) <sup>-1</sup>	Reference conc., RRC (mg/m <sup>3</sup> )
NA	7.0E-01
END	



## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
--	--

NA	4.9E-05
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### MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END

## Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_g$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_g$ (ppmv)	Chemical
71556	4.63E+02			1,1,1-Trichloroethane

MORE  
↓

ENTER Depth below grade to bottom of enclosed space floor, $L_e$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	304.8	20.2	LS		

MORE  
↓

ENTER Vadose zone soil dry bulk density, $\rho_b^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
1.46	0.457	0.204

MORE  
↓

ENTER Averaging time for carcinogens, $AT_C$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, H (atm·m <sup>3</sup> /mol)	Henry's law constant reference temperature, T <sub>H</sub> (°C)	Enthalpy of vaporization at the normal boiling point, ΔH <sub>v</sub> (cal/mol)	Normal boiling point, T <sub>B</sub> (°K)	Critical temperature, T <sub>C</sub> (°K)	Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
7.80E-02	8.80E-06	1.72E-02	25	7,136	347.24	545.00	0.0E+00	1.0E+00	133.41

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, $L_r$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_{se}$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{re}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor- wall seam perimeter, $X_{crack}$ (cm)	Soil gas conc., $C_{soil}$ (µg/m <sup>3</sup> )	Bldg. ventilation rate, $G_{building}$ (cm <sup>3</sup> /s)
289.8	0.253	0.380	1.65E-08	0.717	1.18E-06	3.844	4.63E+02	5.63E+04

Area of enclosed space below grade, $A_g$ (cm <sup>2</sup> )	Crack- to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{vTS}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (atm·m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cm·s)	Vadose zone effective diffusion coefficient, $D_{eff,v}$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.16E-04	15	7,774	1.39E-02	5.76E-01	1.79E-04	3.84E-03	289.6

Convection path length, $L_p$ (cm)	Source vapor conc., $C_{source}$ (µg/m <sup>3</sup> )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{avg}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ (µg/m <sup>3</sup> )
15	4.63E+02	0.10	1.12E+01	3.84E-03	3.84E+02	3.97E+49	1.04E-04	4.82E-02

Unit risk factor, URF (µg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )
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NA	1.0E+00
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END



## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	4.6E-05

MESSAGE SUMMARY BELOW:

END

## Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_s$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_s$ (ppmv)	Chemical
71432	4.83E+01			Benzene

MORE  
↓

ENTER Depth below grade to bottom of enclosed space floor, $L_p$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	304.8	20.2	LS		

MORE  
↓

ENTER Vadose zone soil dry bulk density, $\rho_s^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
1.48	0.457	0.204

MORE  
↓

ENTER Averaging time for carcinogens, $AT_C$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs)	ENTER Exposure duration, $ED$ (yrs)	ENTER Exposure frequency, $EF$ (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, H (atm·m <sup>3</sup> /mol)	Henry's law constant reference temperature, T <sub>R</sub> (°C)	Enthalpy of vaporization at the normal boiling point, ΔH <sub>vb</sub> (cal/mol)	Normal boiling point, T <sub>B</sub> (°K)	Critical temperature, T <sub>C</sub> (°K)	Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., R/C (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
8.80E-02	9.80E-06	5.56E-03	25	7,342	353.24	582.16	2.9E-05	8.0E-02	78.11

END

INTERMEDIATE CALCULATIONS SHEET

Source-building separation, $L_f$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_w$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor-wall seam perimeter, $X_{crack}$ (cm)	Soil gas conc., $\mu g/m^3$	Bldg. ventilation rate, $Q_{building}$ (cm <sup>3</sup> /s)
289.8	0.253	0.380	1.65E-08	0.717	1.18E-08	3,844	4.63E+01	5.83E+04

Area of enclosed space below grade, $A_g$ (cm <sup>2</sup> )	Crack-to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,ts}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{ts}$ (atm-m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{ts}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{ts}$ (g/cm-s)	Vadose zone effective diffusion coefficient, $D_v^e$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.18E-04	15	8,017	4.48E-03	1.65E-01	1.79E-04	4.34E-03	289.8

Convection path length, $L_c$ (cm)	Source vapor conc., $C_{source}$ ( $\mu g/m^3$ )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{soil}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}^e$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ ( $\mu g/m^3$ )
15	4.63E+01	0.10	1.12E+01	4.34E-03	3.84E+02	8.99E+43	1.10E-04	5.09E-03

Unit risk factor, URF ( $\mu g/m^3$ ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )
2.9E-05	5.0E-02
END	



## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unless)
6.1E-08	6.1E-05

MESSAGE SUMMARY BELOW:

END

Soil Gas Concentration Data			
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_s$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_s$ (ppmv)
108883	9.28E+02		

Chemical
Toluene

ENTER Depth below grade to bottom of enclosed space floor, $L_f$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_w$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	304.6	20.2	LS		

ENTER Vadose zone soil dry bulk density, $\rho_s^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
1.48	0.457	0.204

ENTER Averaging time for carcinogens, $AT_C$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs)	ENTER Exposure duration, $ED$ (yrs)	ENTER Exposure frequency, $EF$ (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ [cm <sup>2</sup> /s]	Diffusivity in water, $D_w$ [cm <sup>2</sup> /s]	Henry's law constant at reference temperature, H [atm·m <sup>3</sup> /mol]	Henry's law constant reference temperature, T <sub>R</sub> [°C]	Enthalpy of vaporization at the normal boiling point, ΔH <sub>vb</sub> [cal/mol]	Normal boiling point, T <sub>b</sub> [°K]	Critical temperature, T <sub>c</sub> [°K]	Unit risk factor, URF [μg/m <sup>3</sup> ] <sup>-1</sup>	Reference conc., RfC [mg/m <sup>3</sup> ]	Molecular weight, MW [g/mol]
8.70E-02	8.60E-08	6.83E-03	25	7.930	383.78	591.79	0.0E+00	3.0E-01	92.14

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, $L_r$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_{ae}$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor- wall seam perimeter, $X_{crack}$ (cm)	Soil gas conc., $C_{soil}$ (μg/m <sup>3</sup> )	Bldg. ventilation rate, $Q_{building}$ (cm <sup>3</sup> /s)
289.6	0.253	0.380	1.65E-06	0.717	1.18E-06	3,844	9.28E+02	5.63E+04

Area of enclosed space below grade, $A_g$ (cm <sup>2</sup> )	Crack- to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (atm-m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{TE}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cm-s)	Vadose zone effective diffusion coefficient, $D_{eff}^v$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.18E-04	15	9,043	5.16E-03	2.15E-01	1.79E-04	4.29E-03	289.6

Convection path length, $L_c$ (cm)	Source vapor conc., $C_{source}$ (μg/m <sup>3</sup> )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{tot}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}^{eff}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $exp[Pe^f]$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ (μg/m <sup>3</sup> )
15	9.28E+02	0.10	1.12E+01	4.29E-03	3.84E+02	2.90E+44	1.09E-04	1.02E-01

Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )
NA	3.0E-01
END	



## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	3.2E-04

MESSAGE SUMMARY BELOW:

END

Soil Gas Concentration Data			
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_s$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_s$ (ppmv)
79016	4.63E+02		
			Chemical
			Trichloroethylene

ENTER Depth below grade to bottom of enclosed space floor, $L_p$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	274.3	20.2	LS		

ENTER Vadose zone soil dry bulk density, $\rho_s^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
1.45	0.457	0.204

ENTER Averaging time for carcinogens, $AT_C$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, H (atm-m <sup>3</sup> /mol)	Henry's law constant reference temperature, T <sub>H</sub> [°C]	Enthalpy of vaporization at the normal boiling point, ΔH <sub>bo</sub> (cal/mol)	Normal boiling point, T <sub>B</sub> [°K]	Critical temperature, T <sub>C</sub> [°K]	Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
7.80E-02	9.10E-06	1.03E-02	25	7,505	360.36	544.20	2.0E-06	6.0E-01	131.39

END

# INTERMEDIATE CALCULATIONS SHEET

Source- building separation, $L_r$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_{se}$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{rg}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor- wall seam perimeter, $X_{seam}$ (cm)	Soil gas conc., $C_{soil}$ (µg/m <sup>3</sup> )	Bldg. ventilation rate, $G_{building}$ (cm <sup>3</sup> /s)
259.3	0.253	0.380	1.65E-08	0.717	1.18E-08	3.844	4.63E+02	5.83E+04

Area of enclosed space below grade, $A_g$ (cm <sup>2</sup> )	Crack- to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{vgs}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{rg}$ (atm·m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{rg}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{rg}$ (g/cm·s)	Vadose zone effective diffusion coefficient, $D_{eff}^v$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.16E-04	15	8,430	8.16E-03	3.39E-01	1.79E-04	3.89E-03	259.3

Convection path length, $L_p$ (cm)	Source vapor conc., $C_{source}$ (µg/m <sup>3</sup> )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{soil}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D^{crack}$ (cm <sup>2</sup> /s)	Area of crack $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ (µg/m <sup>3</sup> )
15	4.63E+02	0.10	1.12E+01	3.89E-03	3.84E+02	9.26E+48	1.10E-04	5.10E-02

Unit risk factor, URF (µg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )
2.0E-06	8.0E-01
END	



## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
4.2E-08	8.2E-05

MESSAGE SUMMARY BELOW:

END

UTSC/HERD 12/1/01

## Soil Gas Concentration Data

ENTER Chemical/ CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_s$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_g$ (ppmv)	Chemical
127164	1.12E+03			1,1,1-trichloroethylene

MORE  
↓

ENTER Depth below grade to bottom of enclosed space floor, $L_F$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_w$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	274.3	20.2	L5		

MORE  
↓

ENTER Vadose zone soil dry bulk density, $\rho_s^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
1.46	0.457	0.204

MORE  
↓

ENTER Averaging time for carcinogens, $AT_C$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs)	ENTER Exposure duration, $ED$ (yrs)	ENTER Exposure frequency, $EF$ (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, H (atm·m <sup>3</sup> /mol)	Henry's law constant reference temperature, $T_R$ [°C]	Enthalpy of vaporization at the normal boiling point, $\Delta H_{vb}$ (cal/mol)	Normal boiling point, $T_b$ [°K]	Critical temperature, $T_c$ [°K]	Unit risk factor, URF (µg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
7.20E-02	8.20E-06	1.84E-02	25	8,288	394.40	620.20	5.9E-08	3.9E-02	165.83

END

INTERMEDIATE CALCULATIONS SHEET

Source-building separation, $L_r$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_{oe}$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{rg}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor-wall seam perimeter, $X_{crack}$ (cm)	Soil gas conc. ( $\mu\text{g}/\text{m}^3$ )	Bldg. ventilation rate, $Q_{building}$ (cm <sup>3</sup> /s)
259.3	0.253	0.380	1.65E-08	0.717	1.18E-08	3.844	1.12E+03	5.83E+04

Area of enclosed space below grade, $A_s$ (cm <sup>2</sup> )	Crack-to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,ts}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{ts}$ (atm·m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H'_{ts}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{rs}$ (g/cm·s)	Vadose zone effective diffusion coefficient, $D_{eff}^v$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.18E-04	15	9.449	1.42E-02	5.89E-01	1.79E-04	3.55E-03	259.3

Convection path length, $L_r$ (cm)	Source vapor conc., $C_{source}$ ( $\mu\text{g}/\text{m}^3$ )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{soil}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}^{eff}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ ( $\mu\text{g}/\text{m}^3$ )
15	1.12E+03	0.10	1.12E+01	3.55E-03	3.84E+02	5.40E+53	1.06E-04	1.18E-01

Unit risk factor, URF ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup>	Reference conc., RRC (mg/m <sup>3</sup> )
5.9E-08	3.5E-02
END	



## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
2.95E-07	3.2E-03

MESSAGE SUMMARY BELOW:

END

DTSC/HERO 12/1/01

## Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_s$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_s$ (ppmv)	Chemical
100414	4.70E+02			Ethylbenzene

MORE  
↓

ENTER Depth below grade to bottom of enclosed space floor, $L_f$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	304.8	20.2	LS		

MORE  
↓

ENTER Vadose zone soil dry bulk density, $\rho_s^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
1.48	0.457	0.204

MORE  
↓

ENTER Averaging time for carcinogens, $AT_C$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, H (atm·m <sup>3</sup> /mol)	Henry's law constant reference temperature, T <sub>H</sub> (°C)	Enthalpy of vaporization at the normal boiling point, ΔH <sub>vb</sub> (cal/mol)	Normal boiling point, T <sub>B</sub> (°K)	Critical temperature, T <sub>C</sub> (°K)	Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RtC (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
7.50E-02	7.80E-06	7.88E-03	25	8,501	409.34	617.20	0.0E+00	2.0E+00	106.17

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, $L_r$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_{se}$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{rg}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor- wall seam perimeter, $X_{seam}$ (cm)	Soil gas conc., $C_{soil}$ (μg/m <sup>3</sup> )	Bldg. ventilation rate, $Q_{vent}$ (cm <sup>3</sup> /s)
289.8	0.253	0.380	1.65E-08	0.717	1.18E-08	3.844	4.70E+02	5.63E+04

Area of enclosed space below grade, $A_g$ (cm <sup>2</sup> )	Crack- to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,ts}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{ts}$ (atm·m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{ts}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{ts}$ (g/cm·s)	Vadose zone effective diffusion coefficient, $D_{eff}^v$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.16E-04	15	10,038	5.97E-03	2.46E-01	1.79E-04	3.70E-03	289.6

Convection path length, $L_p$ (cm)	Source vapor conc., $C_{source}$ (μg/m <sup>3</sup> )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{avg}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Paclet number, $exp[Pe^*]$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ (μg/m <sup>3</sup> )
15	4.70E+02	0.10	1.12E+01	3.70E-03	3.64E+02	3.78E+51	1.02E-04	4.80E-02

Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RRC (mg/m <sup>3</sup> )
NA	2.0E+00
END	



## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.3E05

### MESSAGE SUMMARY BELOW:

END

Soil Gas Concentration Data			
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_g$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_g$ (ppmv)
108383	9.59E+02		
			Chemical
			m-Xylene

ENTER Depth below grade to bottom of enclosed space floor, $L_e$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	304.8	20.2	LS		

ENTER Vadose zone soil dry bulk density, $\rho_b^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
1.48	0.457	0.204

ENTER Averaging time for carcinogens, $AT_C$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ [cm <sup>2</sup> /s]	Diffusivity in water, $D_w$ [cm <sup>2</sup> /s]	Henry's law constant at reference temperature, H [atm-m <sup>3</sup> /mol]	Henry's law constant reference temperature, $T_R$ [°C]	Enthalpy of vaporization at the normal boiling point, $\Delta H_{vb}$ [cal/mol]	Normal boiling point, $T_b$ [°K]	Critical temperature, $T_c$ [°K]	Unit risk factor, URF [μg/m <sup>3</sup> ] <sup>-1</sup>	Reference conc., RfC [mg/m <sup>3</sup> ]	Molecular weight, MW [g/mol]
7.00E-02	7.80E-06	7.34E-03	25	8.523	412.27	617.05	0.0E+00	7.0E-01	106.17

END

# INTERMEDIATE CALCULATIONS SHEET

Source- building separation, $L_r$ (cm)	Vadose zone soil air-filled porosity, $S_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_g$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>5</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>5</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>5</sup> )	Floor- wall seam perimeter, $X_{crack}$ (cm)	Soil gas conc. $C_{soil}$ (μg/m <sup>3</sup> )	Bldg. ventilation rate, $G_{building}$ (cm <sup>3</sup> /s)
289.8	0.253	0.390	1.65E-08	0.717	1.18E-08	3.844	9.59E+02	5.63E+04

Area of enclosed space below grade, $A_g$ (cm <sup>2</sup> )	Crack- to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (atm·m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{v,TS}$ (g/cm·s)	Vadose zone effective diffusion coefficient, $D_{eff,v}$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.16E-04	15	10,135	5.55E-03	2.30E-01	1.79E-04	3.45E-03	289.8

Convection path length, $L_p$ (cm)	Source vapor conc., $C_{source}$ (μg/m <sup>3</sup> )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{vd}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ (μg/m <sup>3</sup> )
15	9.59E+02	0.10	1.12E+01	3.45E-03	3.84E+02	1.82E+55	9.89E-05	9.46E-02

Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )
NA	7.0E-01
END	



## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air; carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air; noncarcinogen (unitless)
NA	1.3E-04

### MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END

Soil Gas Concentration Data			
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_s$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_s$ (ppmv)
100425	4.83E+02		
			Chemical
			Styrene

ENTER Depth below grade to bottom of enclosed space floor, $L_p$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	609.6	20.2	LS		

ENTER Vadose zone soil dry bulk density, $\rho_s^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
1.46	0.457	0.204

ENTER Averaging time for carcinogens, $AT_c$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{nc}$ (yrs)	ENTER Exposure duration, $ED$ (yrs)	ENTER Exposure frequency, $EF$ (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, H (atm·m <sup>3</sup> /mol)	Henry's law constant reference temperature, T <sub>H</sub> (°C)	Enthalpy of vaporization at the normal boiling point, ΔH <sub>vb</sub> (cal/mol)	Normal boiling point, T <sub>B</sub> (°K)	Critical temperature, T <sub>C</sub> (°K)	Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., R1C (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
7.10E-02	8.00E-06	2.78E-03	25	8.737	418.31	636.00	0.0E+00	9.0E-01	104.15

END

# INTERMEDIATE CALCULATIONS SHEET

Source- building separation, $L_r$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_{te}$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>5</sup> )	Floor- wall seam perimeter, $X_{seam}$ (cm)	Soil gas conc., $C_{soil}$ (µg/m <sup>3</sup> )	Bldg. ventilation rate, $Q_{building}$ (cm <sup>3</sup> /s)
594.6	0.253	0.380	1.85E-08	0.717	1.18E-08	3.844	4.63E+02	5.63E+04

Area of enclosed space below grade, $A_g$ (cm <sup>2</sup> )	Crack- to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{vTS}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (atm·m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cms)	Vadose zone effective diffusion coefficient, $D_{eff}^v$ (cm <sup>2</sup> /s)	Diffusion path length, $L_g$ (cm)
9.24E+05	4.16E-04	15	10,337	2.07E-03	8.82E-02	1.79E-04	3.50E-03	594.6

Convection path length, $L_g$ (cm)	Source vapor conc., $C_{source}$ (µg/m <sup>3</sup> )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{bldg}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $\exp(Pe')$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{bldg}$ (µg/m <sup>3</sup> )
15	4.63E+02	0.10	1.12E+01	3.50E-03	3.84E+02	2.88E+54	6.50E-05	3.01E-02

Unit risk factor, URF (µg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )
NA	9.0E-01
END	



## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	3.2E-05

### MESSAGE SUMMARY BELOW:

END

DTSC/HERO 12/1/01

## Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_s$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_s$ (ppmv)	Chemical
85476	4.77E+02			o-Xylene

MORE  
↓

ENTER Depth below grade to bottom of enclosed space floor, $L_f$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $K_v$ ( $\text{cm}^2$ )
15	304.8	20.2	LS		

MORE  
↓

ENTER Vadose zone soil dry bulk density, $\rho_s^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
1.48	0.457	0.204

MORE  
↓

ENTER Averaging time for carcinogens, $AT_c$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{nc}$ (yrs)	ENTER Exposure duration, $ED$ (yrs)	ENTER Exposure frequency, $EF$ (days/yr)
70	30	20	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, H (atm-m <sup>3</sup> /mol)	Henry's law constant reference temperature, T <sub>a</sub> (°C)	Enthalpy of vaporization at the normal boiling point, ΔH <sub>bo</sub> (cal/mol)	Normal boiling point, T <sub>B</sub> (°K)	Critical temperature, T <sub>c</sub> (°K)	Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
8.70E-02	1.00E-05	5.20E-03	25	8,881	417.80	630.30	0.0E+00	7.0E-01	106.17

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, $L_T$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_w$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor- wall seam perimeter, $X_{mst}$ (cm)	Soil gas conc., $C_{soil}$ (µg/m <sup>3</sup> )	Bldg. ventilation rate, $Q_{building}$ (cm <sup>3</sup> /s)
289.8	0.253	0.380	1.65E-08	0.717	1.18E-08	3.844	4.77E+02	5.83E+04

Area of enclosed space below grade, $A_g$ (cm <sup>2</sup> )	Crack- to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (atm-m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cm-s)	Vadose zone effective diffusion coefficient, $D_{eff}^v$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.18E-04	15	10.286	3.91E-03	1.83E-01	1.79E-04	4.29E-03	289.8

Convection path length, $L_p$ (cm)	Source vapor conc., $C_{source}$ (µg/m <sup>3</sup> )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{soil}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}^{eff}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ (µg/m <sup>3</sup> )
15	4.77E+02	0.10	1.12E+01	4.29E-03	3.84E+02	2.88E+44	1.05E-04	5.22E-02

Unit risk factor, URF (µg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )
NA	7.0E-01
END	



# RESULTS SHEET

## INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient, from vapor intrusion to indoor air, noncarcinogen (unitless)
--	---

NA	7.2E-05
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## MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation..

END

DATA E: JHEET

DTSC/HERO 12/1/01

Soil Gas Concentration Data			
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_g$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_g$ (ppmv)
102578	4.65E+02		
			Chemical
			1,3,5-Trimethylbenzene

ENTER Depth below grade to bottom of enclosed space floor, $L_f$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	609.5	20.2	LS		

ENTER Vadose zone soil dry bulk density, $\rho_s^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
1.48	0.437	0.204

ENTER Averaging time for carcinogens, $AT_C$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, H (atm·m <sup>3</sup> /mol)	Henry's law constant reference temperature, T <sub>R</sub> (°C)	Enthalpy of vaporization at the normal boiling point, ΔH <sub>vs</sub> (cal/mol)	Normal boiling point, T <sub>B</sub> (°K)	Critical temperature, T <sub>C</sub> (°K)	Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
7.50E-02	7.10E-06	4.05E-04	25	11,360	437.80	639.00	0.0E+00	5.0E-03	120.00
END									

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, $L_s$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_{wt}$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_r$ (cm <sup>2</sup> )	Floor- wall seam perimeter, $X_{crack}$ (cm)	Soil gas conc., $C_{soil}$ (µg/m <sup>3</sup> )	Bldg. ventilation rate, $Q_{bldg}$ (cm <sup>3</sup> /s)
594.6	0.253	0.380	1.65E-08	0.717	1.19E-08	3,844	4.66E+02	5.63E+04

Area of enclosed space below grade, $A_6$ (cm <sup>2</sup> )	Crack- to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{LHS}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{HS}$ (atm·m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{HS}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{HS}$ (g/cm·s)	Vadose zone effective diffusion coefficient, $D_{eff}^v$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.16E-04	15	14,037	2.75E-04	1.14E-02	1.79E-04	3.71E-03	594.6

Convection path length, $L_c$ (cm)	Source vapor conc., $C_{source}$ (µg/m <sup>3</sup> )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{avg}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{bldg}$ (µg/m <sup>3</sup> )
15	4.66E+02	0.10	1.12E+01	3.71E-03	3.84E+02	2.40E+51	6.76E-05	3.15E-02

Unit risk factor, URF (µg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RnC (mg/m <sup>3</sup> )
NA	8.05E-03
END	



# RESULTS SHEET

## INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
--	--

NA	5.1E-03
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## MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END

## Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_g$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_g$ (ppmv)	Chemical
95363	5.24E+02			1,2,4-Trimethylbenzene

MORE  
↓

ENTER Depth below grade to bottom of enclosed space floor, $L_f$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	808.6	20.2	LS		

MORE  
↓

ENTER Vadose zone soil dry bulk density, $\rho_s^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
1.48	0.457	0.204

MORE  
↓

ENTER Averaging time for carcinogens, $AT_C$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ [cm <sup>2</sup> /s]	Diffusivity in water, $D_w$ [cm <sup>2</sup> /s]	Henry's law constant at reference temperature, H [atm·m <sup>3</sup> /mol]	Henry's law constant reference temperature, $T_R$ [°C]	Enthalpy of vaporization at the normal boiling point, $\Delta H_b$ [cal/mol]	Normal boiling point, $T_b$ [°K]	Critical temperature, $T_c$ [°K]	Unit risk factor, URF [(μg/m <sup>3</sup> ) <sup>-1</sup> ]	Reference conc., RfC [mg/m <sup>3</sup> ]	Molecular weight, MW [g/mol]
7.50E-02	7.10E-08	4.63E-04	25	11,480	442.40	650.00	0.0E+00	6.0E-03	120.00

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, $L_T$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_{at}$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor- wall seam perimeter, $X_{wall}$ (cm)	Soil gas conc., $C_{soil}$ (μg/m <sup>3</sup> )	Bldg. ventilation rate, $Q_{vent}$ (cm <sup>3</sup> /s)
594.6	0.253	0.980	1.85E-08	0.717	1.18E-08	3.844	5.24E+02	5.63E+04

Area of enclosed space below grade, $A_g$ (cm <sup>2</sup> )	Crack- to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,ts}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{ts}$ (atm·m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{ts}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{ts}$ (g/cm·s)	Vadose zone effective diffusion coefficient, $D_{eff}^v$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.16E-04	15	14,135	3.13E-04	1.30E-02	1.79E-04	3.71E-03	594.6

Convection path length, $L_p$ (cm)	Source vapor conc., $C_{source}$ (μg/m <sup>3</sup> )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{air}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{bldg}$ (μg/m <sup>3</sup> )
15	5.24E+02	0.10	1.12E+01	3.71E-03	3.84E+02	2.54E+51	6.76E-05	3.54E-02

Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )
NA	6.0E-03
END	



## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	5.7E-03

### MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END

**JOHNSON AND ETTINGER SOIL SCREEN MODEL  
USING MAXIMUM CONCENTRATIONS**

Soil Gas Concentration Data			
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_s$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_g$ (ppmv)
75718	7.54E+01		
			Chemical
			Dichlorodifluoromethane

ENTER Depth below grade to bottom of enclosed space floor, $L_e$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	6096	20.2	LS		

ENTER Vadose zone soil dry- bulk density, $\rho_s^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
1.45	0.457	0.204

ENTER Averaging time for carcinogens, $AT_C$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs)	ENTER Exposure duration, $ED$ (yrs)	ENTER Exposure frequency, $EF$ (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, H (atm·m <sup>3</sup> /mol)	Henry's law constant reference temperature, T <sub>0</sub> (°C)	Enthalpy of vaporization at the normal boiling point, ΔH <sub>v,0</sub> (cal/mol)	Normal boiling point, T <sub>B</sub> (°K)	Critical temperature, T <sub>C</sub> (°K)	Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
8.00E-02	1.10E-05	7.24E-06	25	5,246	243.00	370.00	0.0E+00	2.0E-01	120.00

END



# INTERMEDIATE CALCULATIONS SHEET

Source-building separation, $L_f$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_{se}$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor-wall seam perimeter, $X_{crack}$ (cm)	Soil gas conc., $\mu g/m^3$	Bldg. ventilation rate, $Q_{building}$ (cm <sup>3</sup> /s)
594.6	0.253	0.380	1.65E-08	0.717	1.18E-08	3,844	7.54E+01	5.63E+04

Area of enclosed space below grade, $A_E$ (cm <sup>2</sup> )	Crack-to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (atm·m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cm·s)	Vadose zone effective diffusion coefficient, $D_{eff}^v$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.16E-04	15	4.352	6.42E-06	2.67E-04	1.79E-04	4.93E-03	594.6

Convection path length, $L_p$ (cm)	Source vapor conc., $C_{source}$ (μg/m <sup>3</sup> )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{bldg}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ (μg/m <sup>3</sup> )
15	7.54E+01	0.10	1.12E+01	4.93E-03	3.84E+02	4.33E+38	8.09E-05	6.10E-03

Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )
NA	2.0E-01
END	

# RESULTS SHEET

## INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.9E-05

## MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END

DTSC/HERD 12/1/01

## Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_g$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_g$ (ppmv)	Chemical
75694	1.71E+02			Trichlorofluoromethane

MORE  
↓

ENTER Depth below grade to bottom of enclosed space floor, $L_e$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone BCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	609.6	20.2	LS		

MORE  
↓

ENTER Vadose zone soil dry bulk density, $\rho_b^d$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^v$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^v$ ( $\text{cm}^3/\text{cm}^3$ )
1.48	0.457	0.204

MORE  
↓

ENTER Averaging time for carcinogens, $AT_c$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{nc}$ (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, H (atm·m <sup>3</sup> /mol)	Henry's law constant reference temperature, $T_H$ (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v2}$ (cal/mol)	Normal boiling point, $T_B$ (°K)	Critical temperature, $T_C$ (°K)	Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
8.70E-02	1.30E-05	3.08E-05	25	8,168	298.87	471.15	0.0E+00	7.0E-01	137.40

END



# INTERMEDIATE CALCULATIONS SHEET

Source- building separation, $L_r$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_{bs}$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor- wall seam perimeter, $X_{crack}$ (cm)	Soil gas conc., $\mu g/m^3$	Bldg. ventilation rate, $Q_{air,bldg}$ (cm <sup>3</sup> /s)
594.6	0.253	0.380	1.85E-08	0.717	1.18E-09	3.844	1.71E+02	5.63E+04

Area of enclosed space below grade, $A_b$ (cm <sup>2</sup> )	Crack- to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (atm-m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cm-s)	Vadose zone effective diffusion coefficient, $D_v^{\text{eff}}$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.16E-04	15	8.211	2.59E-05	1.08E-03	1.79E-04	4.58E-03	594.6

Convection path length, $L_c$ (cm)	Source vapor conc., $C_{source}$ ( $\mu g/m^3$ )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{soil}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}^{\text{eff}}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{bldg}$ ( $\mu g/m^3$ )
15	1.71E+02	0.10	1.12E+01	4.58E-03	3.84E+02	4.49E+41	7.73E-05	1.32E-02

Unit risk factor, URF ( $\mu g/m^3$ ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )
NA	7.0E-01
END	

## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
--	--

NA	1.8E-05
----	---------

### MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END

Soil Gas Concentration Data			
ENTER Chemical CAS No. [numbers only, no dashes]	ENTER Soil gas conc., $C_s$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_s$ (ppmv)
			Chemical
71556	7.78E+00		1,1,1-Trichloroethane

ENTER Depth below grade to bottom of enclosed space floor, $L_e$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	304.8	20.2	LS		

ENTER Vadose zone soil dry bulk density, $\rho_b^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
1.46	0.457	0.204

ENTER Averaging time for carcinogens, $AT_C$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs)	ENTER Exposure duration, $ED$ (yrs)	ENTER Exposure frequency, $EF$ (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, H (atm·m <sup>3</sup> /mol)	Henry's law constant reference temperature, T <sub>R</sub> (°C)	Enthalpy of vaporization at the normal boiling point, ΔH <sub>vb</sub> (cal/mol)	Normal boiling point, T <sub>B</sub> (°K)	Critical temperature, T <sub>C</sub> (°K)	Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
7.60E-02	8.60E-06	1.72E-02	25	7,136	347.24	545.00	0.0E+00	1.0E+00	133.41

END



INTERMEDIATE CALCULATIONS SHEET

Source-building separation, $L_r$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_{we}$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor-wall seam perimeter, $X_{wvsd}$ (cm)	Soil gas conc., ( $\mu\text{g}/\text{m}^3$ )	Bldg. ventilation rate, $Q_{\text{building}}$ (cm <sup>3</sup> /s)
289.8	0.253	0.380	1.85E-08	0.717	1.18E-08	3.844	7.76E+00	5.63E+04

Area of enclosed space below grade, $A_E$ (cm <sup>2</sup> )	Crack-to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{\text{crack}}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (atm·m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cm·s)	Vadose zone effective diffusion coefficient, $D_{eff,v}$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+03	4.18E-04	15	7.774	1.39E-02	5.76E-01	1.79E-04	3.84E-03	289.8

Convection path length, $L_p$ (cm)	Source vapor conc., $C_{\text{source}}$ ( $\mu\text{g}/\text{m}^3$ )	Crack radius, $r_{\text{crack}}$ (cm)	Average vapor flow rate into bldg., $Q_{\text{air}}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{\text{crack}}$ (cm <sup>2</sup> /s)	Area of crack, $A_{\text{crack}}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{\text{building}}$ ( $\mu\text{g}/\text{m}^3$ )
15	7.76E+00	0.10	1.12E+01	3.84E-03	3.84E+02	3.87E+49	1.04E-04	8.07E-04

Unit risk factor, URF ( $\mu\text{g}/\text{m}^3\text{-y}^{-1}$ )	Reference conc., RfC (mg/m <sup>3</sup> )
NA	1.0E+00
END	

## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	7.7E-07

MESSAGE SUMMARY BELOW:

END

DTSC/HEAD 12/1/01

Soil Gas Concentration Data			
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_s$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_g$ (ppmv)
71432	6.17E+00		
			Chemical
			Benzene

ENTER Depth below grade to bottom of enclosed space floor, $L_e$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	304.8	20.2	LS		

ENTER Vadose zone soil dry bulk density, $\rho_b^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_a^V$ ( $\text{cm}^3/\text{cm}^3$ )
1.48	0.457	0.204

ENTER Averaging time for carcinogens, $AT_C$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, H (atm·m <sup>3</sup> /mol)	Henry's law constant reference temperature, $T_R$ [°C]	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, $T_b$ (°K)	Critical temperature, $T_c$ (°K)	Unit risk factor, URF (µg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
8.80E-02	9.80E-06	5.56E-03	25	7,342	353.24	582.16	2.9E-05	6.0E-02	78.11

END



INTERMEDIATE CALCULATIONS SHEET

Source building separation, $L_f$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_{ea}$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor-wall seam perimeter, $X_{crack}$ (cm)	Soil gas conc., ( $\mu\text{g}/\text{m}^3$ )	Bldg. ventilation rate, $Q_{building}$ (cm <sup>3</sup> /s)
289.8	0.253	0.380	1.65E-08	0.717	1.18E-08	3.844	6.17E+00	5.83E+04

Area of enclosed space below grade, $A_g$ (cm <sup>2</sup> )	Crack-to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (atm·m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cm·s)	Vadose zone effective diffusion coefficient, $D_{eff,v}$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.18E-04	15	8.017	4.46E-03	1.85E-01	1.79E-04	4.34E-03	289.8

Convection path length, $L_c$ (cm)	Source vapor conc., $C_{source}$ ( $\mu\text{g}/\text{m}^3$ )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{soil}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ ( $\mu\text{g}/\text{m}^3$ )
15	6.17E+00	0.10	1.12E+01	4.34E-03	3.84E+02	8.99E+43	1.10E-04	6.79E-04

Unit risk factor, URF ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )
2.9E-05	8.0E-02
END	

## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unless)
8.1E-09	1.1E-05

MESSAGE SUMMARY BELOW:

END

Soil Gas Concentration Data			
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc. $C_g$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc. $C_g$ (ppmv)
108883	9.96E+01		
			Chemical
			Toluene

MORE ↓	ENTER Depth below grade to bottom of enclosed space floor, $L_e$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone GCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
		15	304.8	20.2	LS	

MORE ↓	ENTER Vadose zone soil dry bulk density, $\rho_d^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
	1.48	0.457	0.204

MORE ↓	ENTER Averaging time for carcinogens, $AT_C$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
	70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, H (atm·m <sup>3</sup> /mol)	Henry's law constant reference temperature, T <sub>H</sub> [°C]	Enthalpy of vaporization at the normal boiling point, ΔH <sub>v2</sub> (cal/mol)	Normal boiling point, T <sub>B</sub> (°K)	Critical temperature, T <sub>C</sub> (°K)	Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RRC (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
8.70E-02	8.60E-06	6.63E-03	25	7,930	383.78	591.79	0.0E+00	3.0E-01	92.14

END



INTERMEDIATE CALCULATIONS SHEET

Source- building separation, $L_r$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_{at}$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor- wall seam perimeter, $X_{crack}$ (cm)	Soil gas conc., $C_{soil}$ (µg/m <sup>3</sup> )	Bldg. ventilation rate, $Q_{building}$ (cm <sup>3</sup> /s)
289.8	0.253	0.380	1.85E-08	0.717	1.18E-08	3.844	9.96E+01	5.63E+04

Area of enclosed space below grade, $A_g$ (cm <sup>2</sup> )	Crack- to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{vTS}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (atm·m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cm·s)	Vadose zone effective diffusion coefficient, $D_{eff}^v$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.18E-04	15	9.043	5.18E-03	2.15E-01	1.79E-04	4.29E-03	289.8

Convection path length, $L_c$ (cm)	Source vapor conc., $C_{source}$ (µg/m <sup>3</sup> )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{soil}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}^{eff}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ (µg/m <sup>3</sup> )
15	9.88E+01	0.10	1.12E+01	4.29E-03	3.84E+02	2.90E+44	1.09E-04	1.09E-02

Unit risk factor, URF (µg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RRC (mg/m <sup>3</sup> )
NA	3.0E-01
END	

## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	3.5E-05

MESSAGE SUMMARY BELOW:

END

DTSC/HERD 12/1/01

## Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_s$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_g$ (ppmv)	Chemical
79016	2.07E+01			Trichloroethylene

MORE  
↓

ENTER Depth below grade to bottom of enclosed space floor, $L_f$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	274.3	20.2	LS		

MORE  
↓

ENTER Vadose zone soil dry bulk density, $\rho_d^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
1.48	0.457	0.204

MORE  
↓

ENTER Averaging time for carcinogens, $AT_c$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{nc}$ (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, H (atm·m <sup>3</sup> /mol)	Henry's law constant reference temperature, $T_R$ (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{vb}$ (cal/mol)	Normal boiling point, $T_b$ (°K)	Critical temperature, $T_c$ (°K)	Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
7.90E-02	3.10E-08	1.03E-02	25	7,505	380.38	544.20	2.0E-06	6.0E-01	131.39

END



# INTERMEDIATE CALCULATIONS SHEET

Source-building separation, $L_T$ [cm]	Vadose zone soil air-filled porosity, $\theta_a^v$ [cm <sup>3</sup> /cm <sup>3</sup> ]	Vadose zone effective total fluid saturation, $S_w$ [cm <sup>3</sup> /cm <sup>3</sup> ]	Vadose zone soil intrinsic permeability, $k$ [cm <sup>2</sup> ]	Vadose zone soil relative air permeability, $k_{rg}$ [cm <sup>2</sup> ]	Vadose zone soil effective vapor permeability, $k_v$ [cm <sup>2</sup> ]	Floor-wall seam perimeter, $X_{\text{seam}}$ [cm]	Soil gas conc., $C_{\text{soil}}$ [μg/m <sup>3</sup> ]	Bldg. ventilation rate, $Q_{\text{vent}}$ [cm <sup>3</sup> /s]
259.3	0.253	0.380	1.85E-08	0.717	1.18E-08	3.644	2.07E+01	5.63E+04

Area of enclosed space below grade, $A_g$ [cm <sup>2</sup> ]	Crack-to-total area ratio, $\eta$ [unitless]	Crack depth below grade, $Z_{\text{crack}}$ [cm]	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{\text{vgs}}$ [cal/mol]	Henry's law constant at ave. soil temperature, $H_{\text{gs}}$ [atm-m <sup>3</sup> /mol]	Henry's law constant at ave. soil temperature, $H_{\text{fs}}$ [unitless]	Vapor viscosity at ave. soil temperature, $\mu_{\text{fs}}$ [g/cm-s]	Vadose zone effective diffusion coefficient, $D_{\text{eff}}^v$ [cm <sup>2</sup> /s]	Diffusion path length, $L_d$ [cm]
9.24E+05	4.16E-04	15	8,430	8.16E-03	3.39E-01	1.79E-04	3.89E-03	259.3

Convection path length, $L_p$ [cm]	Source vapor conc., $C_{\text{source}}$ [μg/m <sup>3</sup> ]	Crack radius, $r_{\text{crack}}$ [cm]	Average vapor flow rate into bldg., $Q_{\text{inlet}}$ [cm <sup>3</sup> /s]	Crack effective diffusion coefficient, $D_{\text{crack}}$ [cm <sup>2</sup> /s]	Area of crack, $A_{\text{crack}}$ [cm <sup>2</sup> ]	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ [unitless]	Infinite source indoor attenuation coefficient, $\alpha$ [unitless]	Infinite source bldg. conc., $C_{\text{bldg}}$ [μg/m <sup>3</sup> ]
15	2.07E+01	0.10	1.12E+01	3.89E-03	3.64E+02	9.28E+48	1.10E-04	2.28E-03

Unit risk factor, URF [μg/m <sup>3</sup> ] <sup>-1</sup>	Reference conc., RfC [mg/m <sup>3</sup> ]
2.0E-08	6.0E-01
END	

## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unless)
1.9E-09	3.7E-06

MESSAGE SUMMARY BELOW:

END

Soil Gas Concentration Data			
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_g$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_g$ (ppmv)
127184	5.79E+03		
			Chemical
			Tetrachloroethylene

ENTER Depth below grade to bottom of enclosed space floor, $L_e$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	274.3	20.2	LS		

ENTER Vadose zone soil dry bulk density, $\rho_b^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
1.46	0.457	0.204

ENTER Averaging time for carcinogens, $AT_C$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ [cm <sup>2</sup> /s]	Diffusivity in water, $D_w$ [cm <sup>2</sup> /s]	Henry's law constant at reference temperature, H [atm·m <sup>3</sup> /mol]	Henry's law constant reference temperature, $T_R$ [°C]	Enthalpy of vaporization at the normal boiling point, $\Delta H_{\text{bo}}$ [cal/mol]	Normal boiling point, $T_b$ [°K]	Critical temperature, $T_c$ [°K]	Unit risk factor, URF [(μg/m <sup>3</sup> ) <sup>-1</sup> ]	Reference conc., RnC (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
7.20E-02	8.20E-06	1.84E-02	25	8.288	394.40	620.20	5.9E-06	3.5E-02	165.83

END



INTERMEDIATE CALCULATIONS SHEET

Source- building separation, $L_i$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_{se}$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor- wall seam perimeter, $X_{crack}$ (cm)	Soil gas conc., $\mu_g$ (μg/m <sup>3</sup> )	Bldg. ventilation rate, $Q_{building}$ (cm <sup>3</sup> /s)
259.3	0.253	0.380	1.65E-08	0.717	1.18E-08	3.844	5.79E+03	5.63E+04

Area of enclosed space below grade, $A_g$ (cm <sup>2</sup> )	Crack to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (atm-m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cm-s)	Vadose zone effective diffusion coefficient, $D_v^e$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.18E-04	15	9.449	1.42E-02	5.89E-01	1.79E-04	3.55E-03	259.3

Convection path length, $L_p$ (cm)	Source vapor conc., $C_{source}$ (μg/m <sup>3</sup> )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{rad}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}^e$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ (μg/m <sup>3</sup> )
15	5.79E+03	0.10	1.12E+01	3.55E-03	3.84E+02	5.40E+53	1.06E-04	6.11E-01

Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )
5.9E-06	3.5E-02
END	

## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unless)
1.5E-06	1.7E-02

MESSAGE SUMMARY BELOW:

END

Soil Gas Concentration Data			
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_s$ [ $\mu\text{g}/\text{m}^3$ ]	OR	ENTER Soil gas conc., $C_g$ (ppmv)
Chemical			
100414	2.86E+02		Ethylbenzene

ENTER Depth below grade to bottom of enclosed space floor, $L_f$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	304.8	20.2	LS		

ENTER Vadose zone soil dry bulk density, $\rho_b^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
1.46	0.457	0.204

ENTER Averaging time for carcinogens, $AT_c$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{nc}$ (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ ( $\text{cm}^2/\text{s}$ )	Diffusivity in water, $D_w$ ( $\text{cm}^2/\text{s}$ )	Henry's law constant at reference temperature, H ( $\text{atm}\cdot\text{m}^3/\text{mol}$ )	Henry's law constant reference temperature, $T_H$ ( $^\circ\text{C}$ )	Enthalpy of vaporization at the normal boiling point, $\Delta H_{vb}$ ( $\text{cal}/\text{mol}$ )	Normal boiling point, $T_E$ ( $^\circ\text{K}$ )	Critical temperature, $T_c$ ( $^\circ\text{K}$ )	Unit risk factor, URF ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup>	Reference conc., RfC ( $\text{mg}/\text{m}^3$ )	Molecular weight, MW ( $\text{g}/\text{mol}$ )
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7.50E-02	7.80E-06	7.86E-03	25	8,501	409.34	617.20	0.0E+00	2.0E+00	106.17
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END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, $L_r$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_w$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor- wall seam perimeter, $X_{max}$ (cm)	Soil gas conc., $C_{soil}$ (µg/m <sup>3</sup> )	Bldg. ventilation rate, $Q_{building}$ (cm <sup>3</sup> /s)
289.8	0.253	0.380	1.65E-08	0.717	1.18E-08	3.844	2.96E+02	5.63E+04

Area of enclosed space below grade $A_g$ (cm <sup>2</sup> )	Crack- to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,s}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{ts}$ (atm·m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H'_{ts}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{ts}$ (g/cm·s)	Vadose zone effective diffusion coefficient, $D_{eff,v}$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.16E-04	15	10,036	5.97E-03	2.48E-01	1.79E-04	3.70E-03	289.8

Convection path length, $L_c$ (cm)	Source vapor conc., $C_{source}$ (µg/m <sup>3</sup> )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{soil}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $\exp(Pe_f)$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ (µg/m <sup>3</sup> )
15	2.96E+02	0.10	1.12E+01	3.70E-03	3.94E+02	3.78E+51	1.02E-04	3.02E-02

Unit risk factor, URF (µg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )
NA	2.0E+00
END	



## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.4E-05

MESSAGE SUMMARY BELOW:

END

DTSC/HERO 12/1/01

## Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_g$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_g$ (ppmv)	Chemical
108383	1.15E+03			m-Xylene

MORE  
↓

ENTER Depth below grade to bottom of enclosed space floor, $L_s$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $K_v$ ( $\text{cm}^3$ )
15	304.8	20.2	LS		

MORE  
↓

ENTER Vadose zone soil dry bulk density, $\rho_s^d$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^v$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^v$ ( $\text{cm}^3/\text{cm}^3$ )
1.45	0.457	0.204

MORE  
↓

ENTER Averaging time for carcinogens, $AT_c$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{nc}$ (yrs)	ENTER Exposure duration, $ED$ (yrs)	ENTER Exposure frequency, $EF$ (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, H (atm·m <sup>3</sup> /mol)	Henry's law constant reference temperature, T <sub>a</sub> (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{ab}$ (cal/mol)	Normal boiling point, T <sub>b</sub> (°K)	Critical temperature, T <sub>c</sub> (°K)	Unit risk factor, URF (µg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
7.00E-02	7.80E-06	7.34E-03	25	8,523	412.27	817.05	0.0E+00	7.0E-01	106.17

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, $L_r$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_m$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor- wall seam perimeter, $X_{mwx}$ (cm)	Soil gas conc. ( $\mu\text{g}/\text{m}^3$ )	Bldg. ventilation rate, $Q_{\text{building}}$ (cm <sup>3</sup> /s)
289.8	0.253	0.380	1.65E-08	0.717	1.18E-08	3,844	1.15E+03	5.63E+04

Area of enclosed space below grade, $A_g$ (cm <sup>2</sup> )	Crack- to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{\text{crack}}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (atm·m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cms)	Vadose zone effective diffusion coefficient, $D_{\text{eff},v}$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.16E-04	15	10,135	5.55E-03	2.30E-01	1.78E-04	3.45E-03	289.8

Convection path length, $L_p$ (cm)	Source vapor conc., $C_{\text{source}}$ ( $\mu\text{g}/\text{m}^3$ )	Crack radius, $r_{\text{crack}}$ (cm)	Average vapor flow rate into bldg., $Q_{\text{soil}}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{\text{crack}}$ (cm <sup>2</sup> /s)	Area of crack, $A_{\text{crack}}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $\exp(\text{Pe})$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{\text{building}}$ ( $\mu\text{g}/\text{m}^3$ )
15	1.15E+03	0.10	1.12E+01	3.45E-03	3.84E+02	1.82E+55	9.86E-05	1.13E-01

Unit risk factor, URF ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )
NA	7.0E-01
END	

## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.8E-04

### MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END



DTSC/HERD 12/1/01

## Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_g$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_b$ (ppmv)	Chemical
100425	1.19E+01			Styrene

MORE ↓	ENTER Depth below grade to bottom of enclosed space floor, $L_e$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
	15	609.6	20.2	LS		

MORE ↓	ENTER Vadose zone soil dry bulk density, $\rho_d^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
	1.46	0.457	0.204

MORE ↓	ENTER Averaging time for carcinogens, $AT_c$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{nc}$ (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
	70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ [cm <sup>2</sup> /s]	Diffusivity in water, $D_w$ [cm <sup>2</sup> /s]	Henry's law constant at reference temperature, H [atm·m <sup>3</sup> /mol]	Henry's law constant reference temperature, T <sub>H</sub> [°C]	Enthalpy of vaporization at the normal boiling point, ΔH <sub>ve</sub> [cal/mol]	Normal boiling point, T <sub>E</sub> [°K]	Critical temperature, T <sub>C</sub> [°K]	Unit risk factor, URF [μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC [mg/m <sup>3</sup> ]	Molecular weight, MW [g/mol]
7.10E-02	8.00E-06	2.76E-03	25	8,737	418.31	636.00	0.0E+00	9.0E-01	104.15

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, $L_r$ (cm)	Vadose zone soil air-filled porosity, $\theta_v^V$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_{se}$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor- wall seam perimeter, $X_{crack}$ (cm)	Soil gas conc. ( $\mu\text{g}/\text{m}^3$ )	Bldg. ventilation rate, $Q_{building}$ (cm <sup>3</sup> /s)
594.6	0.253	0.380	1.85E-08	0.717	1.18E-08	3.644	1.19E+01	5.63E+04

Area of enclosed space below grade, $A_g$ (cm <sup>2</sup> )	Crack- to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{vTS}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (atm·m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cms)	Vadose zone effective diffusion coefficient, $D_{eff,v}^V$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.18E-04	15	10,337	2.07E-03	8.62E-02	1.79E-04	3.50E-03	594.6

Convection path length, $L_p$ (cm)	Source vapor conc., $C_{source}$ ( $\mu\text{g}/\text{m}^3$ )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{soil}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ ( $\mu\text{g}/\text{m}^3$ )
15	1.19E+01	0.10	1.12E+01	3.50E-03	3.84E+02	2.88E+54	6.50E-05	7.78E-04

Unit risk factor, URF ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup>	Reference conc., RRC (mg/m <sup>3</sup> )
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NA	9.0E-01
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END

## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unless)
NA	8.3E-07

MESSAGE SUMMARY BELOW:

END

Soil Gas Concentration Data			
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc. $C_g$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc. $C_g$ (ppmv)
95476	4.85E+02		
			Chemical
			c-Xylene

MORE ↓	ENTER Depth below grade to bottom of enclosed space floor, $L_e$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
	15	304.8	20.2	LS		

MORE ↓	ENTER Vadose zone soil dry bulk density, $\rho_b^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
	1.46	0.457	0.204

MORE ↓	ENTER Averaging time for carcinogens, $AT_c$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{nc}$ (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
	70	30	30	350

END



# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ [cm <sup>2</sup> /s]	Diffusivity in water, $D_w$ [cm <sup>2</sup> /s]	Henry's law constant at reference temperature, H [atm·m <sup>3</sup> /mol]	Henry's law constant reference temperature, $T_R$ [°C]	Enthalpy of vaporization at the normal boiling point, $\Delta H_{vs}$ [cal/mol]	Normal boiling point, $T_b$ [°K]	Critical temperature, $T_c$ [°K]	Unit risk factor, URF [μg/m <sup>3</sup> ] <sup>-1</sup>	Reference conc., RIC [mg/m <sup>3</sup> ]	Molecular weight, MW [g/mol]
8.70E-02	1.00E-05	5.20E-03	25	8,681	417.60	630.30	0.0E+00	7.0E-01	106.17

END

INTERMEDIATE CALCULATIONS SHEET

Source-building separation, $L_f$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_{sa}$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor-wall seam perimeter, $X_{crack}$ (cm)	Soil gas conc., (μg/m <sup>3</sup> )	Bldg. ventilation rate, $Q_{building}$ (cm <sup>3</sup> /s)
289.8	0.253	0.390	1.65E-08	0.717	1.18E-08	3,844	4.85E+02	5.63E+04

Area of enclosed space below grade, $A_g$ (cm <sup>2</sup> )	Crack to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,s}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{ts}$ (atm·m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{rs}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{ts}$ (g/cm·s)	Vadose zone effective diffusion coefficient, $D_v^e$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.16E-04	15	10,288	3.91E-03	1.63E-01	1.79E-04	4.29E-03	289.8

Convection path length, $L_p$ (cm)	Source vapor conc., $C_{source}$ (μg/m <sup>3</sup> )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{soil}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}^{eff}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Poiselet number, $exp(Fe^f)$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ (μg/m <sup>3</sup> )
15	4.85E+02	0.10	1.12E+01	4.29E-03	3.84E+02	2.86E+44	1.09E-04	5.31E-02

Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )
NA	7.0E-01
END	

## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unless)
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NA	7.3E-05
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### MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END

DTSC/HERO 12/1/01

Soil Gas Concentration Data			
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_g$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_g$ (ppmv)
			Chemical
108878	1.40E+02		1,3,5-Trimethylbenzene

MORE ↓	ENTER Depth below grade to bottom of enclosed space floor, $L_f$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $K_v$ ( $\text{cm}^2$ )
	15	809.6	20.2	LS		

MORE ↓	ENTER Vadose zone soil dry bulk density, $\rho_b^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
	1.48	0.457	0.204

MORE ↓	ENTER Averaging time for carcinogens, $AT_C$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
	70	20	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, H (atm·m <sup>3</sup> /mol)	Henry's law constant reference temperature, $T_R$ (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v2}$ (cal/mol)	Normal boiling point, $T_b$ (°K)	Critical temperature, $T_c$ (°K)	Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., R/C (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
7.50E-02	7.10E-06	4.05E-04	25	11,360	437.80	639.00	0.0E+00	6.0E-03	120.00

END



INTERMEDIATE CALCULATIONS SHEET

Source- building separation, $L_r$ [cm]	Vadose zone soil air-filled porosity, $\theta_a^v$ [cm <sup>3</sup> /cm <sup>3</sup> ]	Vadose zone effective total fluid saturation, $S_{se}$ [cm <sup>3</sup> /cm <sup>3</sup> ]	Vadose zone soil intrinsic permeability, $k_i$ [cm <sup>2</sup> ]	Vadose zone soil relative air permeability, $k_{ra}$ [cm <sup>2</sup> ]	Vadose zone soil effective vapor permeability, $k_v$ [cm <sup>2</sup> ]	Floor- wall seam perimeter, $X_{crack}$ [cm]	Soil gas conc., $C_{soil}$ [μg/m <sup>3</sup> ]	Bldg. ventilation rate, $Q_{building}$ [cm <sup>3</sup> /s]
594.6	0.253	0.390	1.85E-08	0.717	1.16E-08	3.844	1.40E+02	5.63E+04

Area of enclosed space below grade, $A_g$ [cm <sup>2</sup> ]	Crack- to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ [cm]	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,ts}$ [cal/mol]	Henry's law constant at ave. soil temperature, $H_{ts}$ [atm·m <sup>3</sup> /mol]	Henry's law constant at ave. soil temperature, $H'_{ts}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{ts}$ [g/cm·s]	Vadose zone effective diffusion coefficient, $D_{eff,v}$ [cm <sup>2</sup> /s]	Diffusion path length, $L_d$ [cm]
9.24E+05	4.16E-04	15	14,037	2.75E-04	1.14E-02	1.79E-04	3.71E-03	594.6

Convection path length, $L_c$ [cm]	Source vapor conc., $C_{source}$ [μg/m <sup>3</sup> ]	Crack radius, $r_{crack}$ [cm]	Average vapor flow rate into bldg., $Q_{soil}$ [cm <sup>3</sup> /s]	Crack effective diffusion coefficient, $D_{crack}$ [cm <sup>2</sup> /s]	Area of crack, $A_{crack}$ [cm <sup>2</sup> ]	Exponent of equivalent foundation Peclet number, $exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ [μg/m <sup>3</sup> ]
15	1.40E+02	0.10	1.12E+01	3.71E-03	3.84E+02	2.40E+51	6.70E-05	9.46E-03

Unit risk factor, URF [μg/m <sup>3</sup> ] <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )
NA	6.0E-03
END	

## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
--	--

NA	1.5E-03
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### MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END

DTSC/HERD 12/1/01

Soil Gas Concentration Data			
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_g$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_g$ (ppmv)
Chemical			
85383	1.85E+03		1,2,4-Trimethylbenzene

ENTER Depth below grade to bottom of enclosed space floor, $L_f$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	609.6	20.2	LS		

ENTER Vadose zone soil dry bulk density, $\rho_b^A$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^V$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^V$ ( $\text{cm}^3/\text{cm}^3$ )
1.48	0.457	0.204

ENTER Averaging time for carcinogens, $AT_C$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs)	ENTER Exposure duration, $ED$ (yrs)	ENTER Exposure frequency, $EF$ (days/yr)
70	30	30	350

END

# CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, H (atm·m <sup>3</sup> /mol)	Henry's law constant reference temperature, T <sub>R</sub> (°C)	Enthalpy of vaporization at the normal boiling point, ΔH <sub>vb</sub> (cal/mol)	Normal boiling point, T <sub>b</sub> (°K)	Critical temperature, T <sub>c</sub> (°K)	Unit risk factor, URF (μg/m <sup>3</sup> ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
7.50E-02	7.10E-08	4.83E-04	25	11,460	442.40	850.00	0.0E+00	6.0E-03	120.00

END

INTERMEDIATE CALCULATIONS SHEET

Source-building separation, $L_r$ (cm)	Vadose zone soil air-filled porosity, $\theta_v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_{se}$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>2</sup> )	Vadose zone effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor-wall seam perimeter, $X_{crack}$ (cm)	Soil gas conc., ( $\mu\text{g}/\text{m}^3$ )	Bldg. ventilation rate, $Q_{building}$ (cm <sup>3</sup> /s)
554.6	0.253	0.380	1.85E-08	0.717	1.18E-08	3.844	1.85E+03	5.63E+04

Area of enclosed space below grade, $A_g$ (cm <sup>2</sup> )	Crack-to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,ts}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{ts}$ (atm·m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{ts}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{ts}$ (g/cm·s)	Vadose zone effective diffusion coefficient, $D_v^{eff}$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
9.24E+05	4.16E-04	15	14,135	3.13E-04	1.30E-02	1.79E-04	3.71E-03	594.6

Convection path length, $L_c$ (cm)	Source vapor conc., $C_{source}$ ( $\mu\text{g}/\text{m}^3$ )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{soil}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D^{crack}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ ( $\mu\text{g}/\text{m}^3$ )
15	1.85E+03	0.10	1.12E+01	3.71E-03	3.84E+02	2.54E+51	6.76E-05	1.25E-01

Unit risk factor, URF ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )
NA	6.0E-03
END	



## RESULTS SHEET

### INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unless)
NA	2.0E-02

### MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END

**APPENDIX F**  
**GEOPHYSICAL SURVEY LETTER**



**SPECTRUM**  
G E O P H Y S I C S  
Revealing The Subsurface

Mr. Steve Williams  
Project Manager  
Earth Tech  
100 West Broadway, Suite 240  
Long Beach, California, 90802

February 8, 2002

Spectrum Geophysical conducted a geophysical survey of the former UST pit location at the Sears Auto Center, 12121 Hamlin Street in Los Angeles, California. The survey included testing for subsurface structures utilizing the following methods:

- Shallow-focus terrain conductivity meter
- Ground penetrating radar
- Utility-locating instruments

Results of the geophysical survey indicate the following:

- The vent pipes located on top of the service bays terminate at the former UST pit location. No evidence of existing USTs were identified in the GPR data. Depth of GPR investigation was 5 to 6 feet below ground.
- No evidence to indicating the presence of USTs was found with the shallow-focus terrain conductivity meter or utility-locating instruments.

If there any questions regarding this report please contact Page Jennings at 818-365-9371.

Sincerely,

Dana LeTourneau  
President  
[Dana@spectrum-geophysics.com](mailto:Dana@spectrum-geophysics.com)

**PRELIMINARY ENVIRONMENTAL  
ASSESSMENT REPORT  
PROPOSED EAST VALLEY MIDDLE SCHOOL NO. 1  
HAMLIN STREET AND LAUREL CANYON BOULEVARD  
LOS ANGELES, CALIFORNIA**

**PREPARED FOR:**



**LOS ANGELES UNIFIED SCHOOL DISTRICT  
ENVIRONMENTAL HEALTH AND SAFETY BRANCH  
355 SOUTH GRAND AVENUE, 6<sup>TH</sup> FLOOR  
LOS ANGELES, CALIFORNIA 90012**

**PREPARED BY:**

**EARTH TECH  
100 WEST BROADWAY SUITE 240  
LONG BEACH, CALIFORNIA 90802**

**MARCH 11, 2002**

**PRELIMINARY ENVIRONMENTAL  
ASSESSMENT REPORT  
PROPOSED EAST VALLEY MIDDLE SCHOOL NO. 1  
HAMLIN STREET AND LAUREL CANYON BOULEVARD  
LOS ANGELES, CALIFORNIA**

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## ABBREVIATIONS AND ACRONYMS

ASTM	American Society for Testing and Materials
AST	aboveground storage tank
bgs	below grade surface
Cal/EPA	California Environmental Protection Agency
CARB	California Air Resources Board
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
cm	centimeters
cm <sup>3</sup> /cm <sup>3</sup>	cubic centimeter per cubic centimeter
COPC	chemical of potential concern
DTSC	Department of Toxic Substances Control
EDR	Environmental Data Resources, Inc.
EPA	U.S. Environmental Protection Agency
ERNS	Emergency Response Notification System
FID	Facilities Information Database
FINDS	Facility Index System
g/cm <sup>3</sup>	grams per cubic centimeter
GPR	ground-penetrating radar
HEAST	Health Effects Assessment Summary Tables
HPLC	high-performance liquid chromatography
IRIS	Integrated Risk Information System
IT	IT Corporation
kg	kilograms
LADWP	Los Angeles Department of Water and Power
LAUSD	Los Angeles Unified School District
LUST	California Leaking Underground Storage Tank List
MDL	method detection limit
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MTBE	methyl tert-butyl ether
NPL	National Priorities List
PCB	polychlorinated biphenyl
PCE	tetrachloroethene
PEA	preliminary endangerment assessment
PEC	potential environmental concern
PID	photo-ionization detector
PPB	parts per billion
PRG	preliminary remediation goal
RCRIS_SQG	Resource Conservation and Recovery System □ Generators
RfC	reference concentration
RfD	reference dose
RI/FS	remedial investigation/feasibility study
RWQCB	California Regional Water Quality Control Board
SCAQMD	South Coast Air Quality Management District
Sf	slope factor

SVOC	semivolatile organic compound
TCE	trichloroethene
TPH	total petroleum hydrocarbons
TSD	treatment, storage, and disposal
URF	unit risk factor
USGS	U.S. Geological Survey
UST	California Underground Storage Tank List
VOC	volatile organic compound
µg/dL	micrograms per deciliter
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
µg/m <sup>3</sup>	micrograms per cubic meter

## LIMITATIONS

The services described in this report were performed by Earth Tech Corporation (Earth Tech) on behalf of the Los Angeles Unified School District (LAUSD). Earth Tech was contracted by the LAUSD to conduct a Preliminary Environmental Assessment (PEA) for the proposed East Valley Middle School No. 1 site. The preparation of this PEA report was performed in accordance with our agreement with the LAUSD. This report is solely for the use and information of the LAUSD, unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations presented in this report apply to conditions existing when the PEA was performed. Earth Tech is not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services.

## EXECUTIVE SUMMARY

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The proposed East Valley Middle School No. 1 is an L-shaped area of land bounded by Kittridge Street on the north, Hamlin Street on the south, Laurel Canyon Boulevard on the east, and Saint Clair Avenue to the west, within the North Hollywood area of the incorporated city of Los Angeles, California. The site consists of approximately 10 acres of commercially developed land (see Figure 2) with four buildings, paved parking lots and a public access road (Bellingham Avenue).

Single family residences occupy the area northwest of the property. Commercial properties occupy the area north, northeast, east and south of the property. The Valley Plaza Community Center and Park is located west of the site.

Results of the soil gas and soil matrix sampling program, revealed the detection of 13 VOCs at low to trace levels. The highest concentration of VOC detected was PCE at 5.7896 µg/L at location SG-11 (former UST area).

Analytical results of the soil-matrix sampling program revealed the following:

- All of the 17 Title 22 metals were detected across the site with the exception of Thallium. However, based on a comparison of the site average concentrations of these metals and their respective maximum background concentrations, none of the detected metals were determined to be COPCs.
- Of the 79 samples analyzed for SVOCs, one soil sample (SB-21-0.5), near a former underground hoist) had detectable concentrations of 12 SVOCs. The SVOCs detected are considered to be COPCs.
- Of the 10 soil samples analyzed for pesticides, four samples showed detectable concentrations of one to three separate pesticides. All pesticides detected are considered to be COPCs.
- TPH was detected at low to trace concentrations in one boring (SB-6) at five and nine feet bgs. The concentrations of TPH detected are not considered to be a concern.
- PCBs were not detected at the site.
- The concentration of pH ranged from 4.12 to 5.84.

A total of 30 chemicals were identified as COPCs in soil and soil gas at the site. These COPCs were evaluated in the human health screening evaluation.

Using maximum COPC concentrations detected at the site, a total incremental cancer risk for hypothetical residential exposure to soil through direct contact (including incidental ingestion, dermal contact and inhalation of dust particles) was estimated to be  $8\text{E-}04$ . The chemicals that contributed to more than 99.9 percent of the estimated incremental cancer risk were the carcinogenic SVOCs detected in soil sample SB-21-0.5. The lateral extent of SVOC impacted soil seems to be very limited as only one of 77 samples collected at the site contained detectable concentrations of SVOCs.

The total hazard index for hypothetical residential exposure to soil through direct contact (including incidental ingestion, dermal contact and inhalation of dust particles) was estimated to be  $2.7\text{E-}02$ . The estimated hazard index for the site is below 1.0, the benchmark level for non-cancer effects.

The total cancer risk and hazard index associated with exposure to VOC-impacted indoor air were calculated to be  $1.5\text{E-}6$  and 0.04, respectively. The cancer risk is slightly above the risk criterion of  $1\text{E-}6$ . The total hazard index for this pathway is below the level of regulatory concern (i.e., 1.0).

The use of the maximum detected soil gas concentrations provides a conservative estimate of associated cancer risks and health hazards. Furthermore, assuming that a resident resides at the site 24 hours per day for 30 years also provides a conservative estimate of the chemical exposure.

In order to utilize all soil gas data collected, soil gas data obtained using EPA Method TO-14A and EPA Method 8260 were combined and the 95% upper confidence limit (95% UCL) from the mean was derived for each averaged VOC concentration. The total cancer risk resulting from inhalation of indoor VOCs at their 95% UCL concentrations was  $3.9\text{E-}7$ . The total hazard quotient resulting from this exposure was 0.015. Both values are below the cancer risk criterion of  $1\text{E-}6$  and 1.0 for non-cancer adverse health effects.

For all analytes modeled, the risk due to inhalation of outdoor air was approximately three orders of magnitude smaller than the risk due to inhalation of indoor air. The hazard index due to inhalation of outdoor air was more than an order of magnitude smaller than the hazard index due to inhalation of indoor air. The estimated cancer risk due to inhalation of VOCs in outdoor air was  $2.2\text{E-}9$ . This value is below



the cancer risk criterion of  $1\text{E-}6$ . The estimated total health hazard index due to inhalation of VOCs in outdoor air was  $1.2\text{E-}3$ . This value is also below the level of concern of 1.0.

Cumulative potential risks from soil and soil-gas exposure were calculated by summing all pathways. The total cancer risk is  $8\text{E-}4$  at the proposed school site, which exceeds the acceptable criteria of  $1\text{E-}6$ . If the SVOC data from SB-21-0.5 were removed, the total site cancer risk would be approximately  $1.5\text{E-}6$ , which is slightly above the cancer risk criterion of  $1\text{E-}6$ . Note that the modeled risk is based on the maximum detected concentrations in soil and soil-gas samples rather than an estimate of the average concentrations and therefore provides a conservative estimate of health risk. The cumulative site hazard index is 0.068, which is below the target hazard index of 1.0.

Based on the concentrations of SVOCs detected in soil sample SB-21-0.5, additional assessment to determine the distribution and occurrence of elevated SVOCs should be conducted in the form of a supplemental site investigation (SSI). Results of the SSI will be summarized in a SSI Report with recommendations for either remedial action or no further action. Based on the results of this PEA, no further action for the remainder of the site should be required.



## 1.0 INTRODUCTION

This document presents the Preliminary Environmental Assessment (PEA) for the proposed East Valley Middle School No. 1 site in Los Angeles, California. Earth Tech Inc., (Earth Tech) is submitting this PEA report on behalf of the Los Angeles Unified School District (LAUSD). This PEA was conducted to evaluate possible health impacts to future students and staff at the proposed East Valley Middle School No. 1 site resulting from environmental conditions at the site and surrounding properties.

Earth Tech submitted to the California Environmental Protection Agency (Cal/EPA) Department of Toxic Substances Control (DTSC) a draft PEA Work Plan for the proposed the East Valley Middle School No.1 site for review and comment. Following DTSC's review and comments, Earth Tech prepared and submitted a Draft Final Work Plan (PEA Work Plan) dated December 13, 2001. The DTSC provided approval to the PEA Work Plan in a letter dated December 19, 2001.

The PEA field investigation, laboratory program, and human health screening evaluation were conducted in accordance with the approved PEA Work Plan dated December 13, 2001, with the following exceptions:

- Soil borings SB-19 and SB-20 were relocated. Underground hoists did not exist at the proposed locations but were present in the near vicinity, where borings were not proposed.
- Soil Boring SB-31 was added to investigate former underground hoist. The PEA Work Plan did not have a boring proposed at that location.
- Soil borings SB-32 and SB-33 were added because duplicate numbers (SB-9 and SB-13) were originally shown in the PEA Work Plan.
- Soil boring SB-34 was added adjacent to an elevator shaft to investigate the potential of a release.
- Soil boring SB-6 and soil gas location SG-11 were terminated at nine feet below ground surface (bgs) due to refusal.
- Boring SB-21A was added three feet from boring SB-21 due to refusal at three and one-half feet bgs in boring SB-21.

The proposed East Valley Middle School No. 1 site is located west of Laurel Canyon Boulevard between Hamlin and Kittridge streets in Los Angeles, California (Figure 1).

This PEA report was prepared by Earth Tech using information acquired during review of regulatory records and historical site information, site reconnaissance, and the collection and analysis of environmental samples (including soil, and soil-gas). This PEA report was prepared in accordance with the PEA Guidance Manual (DTSC, 1994, revised 1999), the LAUSD Master Scope of Work, Preliminary Endangerment Assessment (LAUSD, 1999), and the PEA Work Plan (Earth Tech, 2001).

The overall objectives of the PEA include:

- Evaluating historical information for indications of the past use, storage, disposal, or release of hazardous wastes/substances at the site.
- Establishing, through a field sampling and analysis program, the nature of hazardous wastes/substances that could be present in soil, soil vapor, surface water, or groundwater at the site; the associated concentrations; and general extent.
- Estimating the potential threat to public health and/or the environment posed by hazardous constituents at the site using a residential land use scenario.
- Assessing potential impacts/risk from offsite sources in air, soil, soil gas, and groundwater.
- Based on the information provided in the PEA report, either a recommendation for action or no further action will be made.

Based on information developed during the PEA and the conservative human and ecological risk evaluation using the PEA Guidance Manual (DTSC, 1994, revised 1999), the DTSC will make an informed decision about potential risks posed by the site. Possible outcomes of the PEA decision include the requirement for further investigation through the remedial investigation/feasibility study (RI/FS) process if the site is significantly impacted by hazardous substance releases; the need to perform a removal action if localized impacts have occurred due to hazardous substance releases; or issuance of a "no further action" finding if the site is not significantly impacted and risks to human health and the environment are within acceptable levels based on the conservative screening level risk assessment.

## **2.0 SITE DESCRIPTION**

### **2.1 SITE NAME**

The site has been identified by the LAUSD as proposed East Valley Middle School No. 1. Additional information regarding the site description is presented in the Phase I site assessment (Earth Tech, 2001).

### **2.2 SITE ADDRESS**

The proposed East Valley Middle School No. 1 is an L-shaped area of land bounded by Kittridge Street on the north, Hamlin Street on the south, Laurel Canyon Boulevard on the east, and Saint Clair Avenue to the west, within the North Hollywood area of the incorporated City of Los Angeles, California.

The site consists of approximately 10 acres of commercially developed land and roadways (see Figure 2). The site addresses include 6501 through 6559 Laurel Canyon Boulevard (odd numbered addresses), and 12121 Hamlin Street. The property is generally bounded by Laurel Canyon Boulevard on the east, Hamlin Street on the south, Saint Clair Avenue on the west and Kittridge Street on the north.

The major traffic arteries in the area are Laurel Canyon Boulevard to the east, Victory Boulevard to the south, and the 170 (Hollywood) Freeway to the west.

### **2.3 DESIGNATED CONTACT PERSON**

The designated contact person for this project is Mr. Angelo J. Bellomo of the LAUSD Environmental Health and Safety Branch.

### **2.4 MAILING ADDRESS**

The mailing address designated for this project is:

Los Angeles Unified School District  
Office of Environmental Health and Safety  
355 South Grand Avenue, 6th Floor  
Los Angeles, California 90071  
Attn: Mr. Angelo J. Bellomo



## **2.5 TELEPHONE NUMBER**

The telephone number for Mr. Angelo J. Bellomo is (213) 743-5086.

## **2.6 OTHER SITE NAMES**

Other names for the proposed East Valley Middle School No. 1 site include: Valley Plaza, Sears Auto Center and Sears Garden Center. No other site names have been reported.

## **2.7 USEPA IDENTIFICATION NUMBER**

United States EPA (USEPA) Identification Numbers are assigned to specific addresses and not to a business or operation that occupied the property when the number was assigned. Once a number has been assigned, it will not be removed. If conditions no longer require the number's use, the property owner may petition the USEPA for its deactivation. The property at 12121 Hamlin Street, which houses the Sears Auto Center, has its mailing address at 12121 Victory Boulevard. The USEPA Identification Number for this location is CAD980892277.

## **2.8 CALSITES DATABASE NUMBER**

Based on a review of the regulatory database search report and contacts with regulatory agencies, discussed further below, the site is not identified in the CalSites database.

## **2.9 ASSESSOR'S PARCEL NUMBER(S) AND MAP**

The following parcel numbers were identified in the area of the subject property; 2322-005-044 through 2322-005-061.

## **2.10 TOWNSHIP, RANGE, SECTION AND MERIDIAN**

Based on the USGS 7.5-Minute Topographic Series, Van Nuys Quadrangle Map, the site is located in Section 11, Township 1 North, Range 14 West. The approximate geographic coordinates of the site are 34° 11' North latitude, 118° 24' West longitude.

## **2.11 SITE ZONING**

Information obtained from the City of Los Angeles indicates that the entire proposed school site is zoned as commercial. Section 17213 of the California Education Code and Section 21151.8 of the California Public Resources Code prohibit construction of a school upon a current or former hazardous waste disposal site or solid waste disposal site. Based upon information reviewed for preparation of this PEA, the proposed school site is not situated upon a current or former disposal site.

## **2.12 SITE MAPS AND PHOTOGRAPHS**

A vicinity map depicting the site and surrounding area is included as Figure 1, a site plan showing the approximate locations of current and former buildings located within the proposed school boundaries is included as Figure 2, PEA soil gas sampling locations as well as the property addresses are presented in Figure 3, and a detail map showing soil boring locations is included as Figure 4. Site photographs taken during the field investigation (Earth Tech, 2001) are included in Appendix A.

### 3.0 BACKGROUND

This section describes the general background of the subject property, including history, former land use, environmental concerns, summary of previous studies, topography, geology, hydrogeology, and climatic conditions. Additional information regarding the site background is presented in the Phase I Environmental Site Assessment (Phase I) (Earth Tech, 2001).

#### 3.1 SITE STATUS/HISTORICAL SITE INFORMATION

##### 3.1.1 PROPERTY OWNERSHIP

Records search of the property ownership indicate that the various parcels of the property are owned by the following entities: Valley Plaza LLC a Delaware Limited Liability Company; Sears Roebuck and Company; Valley Plaza I & II; Symonds Gladys; and the Henshaw Family Partnership.

##### 3.1.2 FACILITY OPERATORS

The following is a description of the operating business's facility identified with the address.

Address	Facility Name
6501 Laurel Canyon Boulevard	Kragen Auto Parts
6503 Laurel Canyon Boulevard	Fashion Q (clothing store)
6507 Laurel Canyon Boulevard	Blockbuster Video
6513 Laurel Canyon Boulevard	Bakers (shoe store)
6521 Laurel Canyon Boulevard	99¢ Only Store
6527 Laurel Canyon Boulevard	Plus Size Dress Shop
6529 Laurel Canyon Boulevard	See's Candies
6531 Laurel Canyon Boulevard	Unit A Meeting Hall
6533 Laurel Canyon Boulevard	Cute Kids (clothing store)
6533A Laurel Canyon Boulevard	Coffee Shop
6533 ½ Laurel Canyon Boulevard	Phils Barber Shop
6535 Laurel Canyon Boulevard	Amusé (clothing store)
6537 Laurel Canyon Boulevard	My Haircut Place
6541 Laurel Canyon Boulevard	Susies Factory Outlet (clothing store)
6541 ½ Laurel Canyon Boulevard	Don Roberto Jewelry
6543 Laurel Canyon Boulevard	Avenue (clothing store)
6549 Laurel Canyon Boulevard	T-Shirts Factory Outlet
6551 Laurel Canyon Boulevard	Payless Shoe Source
6559 Laurel Canyon Boulevard	El Pantalón (clothing store)
12121 Hamlin Street	Sears Auto Center

The remainder of the site consists of asphalt-paved parking lots and a public right of way (Bellingham Avenue).

### 3.1.3 SITE HISTORY

The following time line describes the historical use and structures of the property.

Year	Source	Discussion
1902	Topographic Map	The site and all surrounding land is unimproved. Victory Boulevard and portions of Laurel Canyon Boulevard are developed streets.
1928	Aerial Photograph	The subject property appears to be agricultural land. Adjacent parcels are sparsely improved with scattered residential dwellings.
1952	Aerial Photograph	The small building at the southern end of the strip shopping center has been constructed. The eastern auto center building has been constructed, along with a small building located where the western auto center building is currently located. The remainder of the subject property appears to be used for parking. Adjacent properties along Laurel Canyon Boulevard are in the process of being improved with commercial/retail structures.
1950-1951	City Directories	There are no listings in the 6500 block of Laurel Canyon Boulevard or the 12000 block of Hamlin Street.
1952	Topographic Map	The site is indicated on the map, within an area of urban development. No further detail is indicated.
1955	Sanborn Map	The strip shopping center is shown on the east side of the subject property. The Sears Auto Center is shown and labeled as auto repairing, gas and oils. A small store is shown at the northeast corner of Hamlin Street and Bellingham Avenue. The portion of the subject property west of Bellingham Avenue is not shown. The Sears store is shown to the south, a carwash to the southwest, residences to the east, and a market to the north.
1960	Sanborn Map	The subject property appears similar to the 1955 Sanborn map. A bank has been added to the north end of the strip shopping center. The small store at Hamlin Street and

Year	Source	Discussion
		Bellingham Avenue is no longer shown and the Sears Auto Center has expanded with a brake shop at the west side. The surrounding properties appear similar to the 1955 Sanborn map. Stores have been constructed at the southeast corner of Hamlin Street and Bellingham Avenue.
1963	Sanborn Map	The subject property appears similar to the 1960 Sanborn map. The west building of the Sears Auto Center has been constructed. The surrounding properties appear similar to the 1960 Sanborn map. Stores have replaced some of the residences on the east side of Laurel Canyon Boulevard.
1965	Aerial Photograph	The existing buildings are seen on the subject property. The east auto center building is smaller than its current configuration. A building is seen on the northwest corner of Hamlin Street and Bellingham Avenue. The remainder of the subject property is used for parking. Commercial development is seen to the north and south, residences to the northwest, and the park to the west. The properties to the east are mixed commercial and residential.
1966	Sanborn Map	The subject property appears similar to the 1963 Sanborn map. The surrounding properties appear similar to the 1963 Sanborn map.
1966	Topographic Map	The buildings seen in the 1965 aerial photograph are shown and labeled Valley Plaza.
1969	Sanborn Map	The subject property appears similar to the 1966 Sanborn map. The surrounding properties appear similar to the 1966 Sanborn map.
1972	Topographic Map	The buildings seen in the 1965 aerial photograph are shown and labeled Valley Plaza.
1976, 1989, 1994	Aerial Photographs	The buildings on the subject property appear similar to the existing development. An addition has been constructed at the south end of the west auto center building. A building is still located at the



Year	Source	Discussion
		northwest corner of Hamlin Street and Bellingham Avenue. The development of the surrounding properties is similar to the existing development.

## 3.2 SURROUNDING PROPERTY LAND USES

### 3.2.1 ADJOINING PROPERTIES AND LAND USES

Single family residences occupy the area northwest of the property. Commercial properties occupy the area north, northeast, east and south of the property. The Valley Plaza Community Center and Park is located west of the property, adjacent to the 170 Freeway.

### 3.2.2 REGULATORY STATUS OF OFFSITE PROPERTIES

Review of selected regulatory databases for documented environmental concerns at the property, or proximity to the property, was conducted by Environmental Data Resources, Inc (EDR) on behalf of Earth Tech. The EDR report is included in Appendix A of the PEA Work Plan. The following is a summary of the EDR report:

- There is one NPL site located within one-half mile east of the property. Due to its distance (½ mile) and direction (cross-gradient), it appears unlikely that this site will negatively impact the proposed school site.
- There are no active CERCLIS sites located within a ½-mile radius of the proposed school site.
- There are no TSDF/SWIS/SWAT sites within ½ mile of the proposed school site.
- There are no CORRACTS sites within one mile of the proposed school site.
- There are no ERNS/CHMIRS incidents located adjacent to the proposed school site.
- There are no RCRA/RCRIS (Large Quantity) Generators located adjacent to the proposed school site.
- There is one RCRA/RCRIS (Small Quantity) Generator located adjacent to the proposed school site (Sears Store). The facility is listed as having no violations.

- There are four CALSITES (HWS) facilities located within a one-mile radius of the proposed school site. The sites appear unlikely to negatively impact the proposed school site due to their distance (1/2 mile and greater).
- One LUST site was identified within ¼ mile north-northeast of the proposed school site. This site has been closed, no evidence reviewed, suggests it would negatively impact the proposed school site.
- There are 5 CORTESE sites identified within a one-mile radius of the proposed school site.
- There is one registered UST site southeast and adjacent to the proposed school site. This site is not included on any release or contamination related databases. This site is not considered to be a recognized environmental condition relative to the subject property.
- No oilfield activity was identified on or adjacent to the proposed school site (Munger Map Book, 1994, Page W-61).

### **3.3 HAZARDOUS SUBSTANCE/WASTE MANAGEMENT INFORMATION**

The following current and/or historic hazardous materials or waste storage facilities were identified in the EDR Regulatory database report, records review, interviews, and/or site reconnaissance performed by Earth Tech (Earth Tech August 2001, December 2001):

- The Sears Auto Center stores new oil in two 200-gallon aboveground storage tanks (ASTs) inside the west building. There are two parts washers that are serviced by the Safety Kleen Company within the shop. Waste oil is stored in 55-gallon drums in the service bays. A 1,000-gallon AST located outside of the west building was formerly used to store waste oil, but is not currently in use. This AST is located within a secondary containment. Used automobile batteries are stored in the service bays and taken off-site by Johnson Controls.
- Nine UST vent pipes were observed on the roof of the Sears Auto Center. A permit was issued in 1951 to Sears, Roebuck and Company for installation of nine USTs at 12137 Hamlin Street. The permit for the USTs was as follows: one 4,000-gallon UST for storage of gasoline, one 8,000-gallon UST for storage of gasoline, six 1,000-gallon USTs for storage of fresh lube oil, and one 1,000-gallon UST for storage of waste oil. In 1971, a permit was issued to Sears Auto Center to abandon one atmospheric tank. The permit did not specify the tank contents, size, or location. In 1988, a permit from the City of Los Angeles Fire Department was issued to Sears Auto Center to abandon seven atmospheric tanks. Documentation accompanying this permit indicates that the seven 1,000-gallon USTs were removed. A note on the site plan attached to the permit indicates that a soil sample was to be taken under the waste oil UST. No documentation of this soil sample was found in the records. Sears Auto Center is also listed as having seven USTs. The USTs listed include one 500-gallon UST for waste oil and six USTs of unspecified size containing unspecified product. The Sears Auto Center is also included on the CA FID UST list, which shows the facility as an inactive UST location. The former USTs at the Sears Auto Center are considered to be a potential environmental condition.

- Hazardous materials in the strip shopping center tenant spaces were limited to small quantities of janitorial supplies and latex paint.
- The only hazardous wastes currently generated at the property are waste oil, batteries, and waste brake cleaning fluid from the Sears Auto Center. The auto center has only recently resumed performing oil changes and has not yet made arrangements for disposal of the waste oil. The site does not currently generate infectious waste.
- Waste Management removes refuse generated at the site for all the commercial waste.
- The LADWP services the proposed school site for electricity and water, and the Southern California Gas Company for natural gas. One pole-mounted electrical transformer was observed near the southeast corner of the residential area northwest of the subject property. Two transformer vaults were observed on the subject property; one located in the alley, west of the strip shopping center and one located in Hamlin Street, south of the southeast corner of the auto center. All of these transformers are owned by LADWP. No staining or signs of leakage were noted in association with the transformers located on the subject property.
- Photo City (former business) at 6525 Laurel Canyon Boulevard is listed as a small-quantity generator with no violations found in the record. Photo City is listed for the generation of photo-chemicals and photo-processing waste. This facility is no longer a tenant at the subject property. Sears store, at 12121 Victory Boulevard south of the property was also listed as a small-quantity generator with no violations found. The listing on the RCRIS database does not represent a recognized environmental condition to the proposed school site.
- Avenue Plus, a clothing store, at 6543 Laurel Canyon Boulevard is listed for the generation of asbestos-containing waste. The Valley Plaza Shopping Center is listed for the generation of asbestos-containing waste. Sears Auto Center is listed for the generation of alkaline solution without metals; off-specification, aged, or surplus organics; asbestos-containing waste; waste oil and mixed oil; laboratory waste chemicals; unspecified solvent mixture waste; and aqueous solution with less than 10% total organic residues. The listing on the HAZNET database does not represent a recognized environmental condition to the proposed school site.
- The FINDS database is a pointer database, which refers back to the Photo City and Sears Auto Center listings on the RCRIS-SQG database. The FINDS database listing does not represent a recognized environmental condition to the proposed school site.

### **3.3.1 PREVIOUS INVESTIGATIONS**

In addition to the Phase I conducted by Earth Tech, a preliminary Phase I Environmental Site Assessment was conducted for the entire Valley Plaza Shopping Center, which includes the subject property, by California Environmental for J.H. Snyder Company, LLC and is dated July 2000. This assessment noted the existing buildings and a one-story vacant commercial structure located at the northwest corner of Hamlin Street and Bellingham Avenue. This structure was reported to be a former Sears Garden Center/Customer Pick-up facility (note: this building was no longer present during Earth Tech's site

reconnaissance on August 8, 2001). The report states that the Sears Auto Center utilizes and generates small quantities of waste oil, solvents, automobile batteries, and other miscellaneous automotive materials. The J.H. Snyder report indicates that nine soil borings were drilled at the Sears Auto Center in 1994. Soil samples collected were found to have concentrations of perchloroethylene also referred to as tetrachloroethene (PCE) up to 19 parts per billion (ppb). The report does not indicate where the soil borings were located, depth of the samples collected, or if the soil samples were analyzed for other compounds.

#### 4.0 APPARENT PROBLEM

Based on the background information reviewed and the observations noted during the site visits, several potential environmental concerns (PECs) were identified. Similar PECs are grouped together as listed below.

- A portion of the proposed school site has been developed with an automobile service center since the early 1950's. Nine USTs were installed at this site in 1951. There is documentation that at least eight of the nine USTs were removed from the subject property by 1988. No documentation concerning the removal or abandonment of the tanks was found; therefore, the possible existence of USTs in the former UST area and residual hydrocarbons beneath the former USTs is a PEC.
- The automobile service center currently has four clarifiers, which receive water from several areas within the facility before discharging to the sanitary sewer. The potential for the clarifiers to have an unauthorized release is a PEC.
- The automobile service center currently has 17 underground hydraulic lifts. In addition, indications are present that at least six additional hydraulic lifts have been abandoned on the site. The potential for the hydraulic cylinders to leak in the subsurface exists.
- One two-story elevator exists at the automobile service center. The elevator is equipped with a hydraulic cylinder, which extends approximately 15 feet below the bottom of the elevator or approximately 30 feet bgs.
- Staining was observed on the concrete floor adjacent to the downstairs air compressors floor drain.
- A former petroleum pipeline was identified beneath Laurel Canyon Boulevard.
- A storm drain inlet is located in the central parking lot.
- A transformer is present north of the Sears Auto Center.
- Existing waste oil ASTs at the Sears Auto Center.
- A former Sears Garden Center was located on the northwest corner of Hamlin Street and Bellingham Avenue.
- Sampling performed as part of a Preliminary Phase I investigation indicated perchloroethylene (PCE) in soil at the Sears Auto Center (J.H. Snyder, 2000). The report does not indicate where the soil borings were located at Sears Auto Center, depth of the samples collected, or if the soil samples were analyzed for other compounds. Therefore, the potential for soil impacted with PCE exists within the subject property area.



The objective of the PEA is to determine whether any release of hazardous or toxic materials has occurred at the site and, if so, to assess whether these contaminants present a potential health threat to future occupants of the proposed East Valley Middle School No. 1. The PEA sampling performed by Earth Tech was intended to provide sufficient data to evaluate the risk to human health, identify any contamination originating at the site, and potential contamination migrating onto the site from off-site sources.

## **5.0 ENVIRONMENTAL SETTING**

This section discusses the potential exposure pathways based on site-specific environmental characteristics such as the topographic, geologic, and hydrogeologic features of the site and surrounding areas. The conceptual site model for potential pathways is presented in Figure 5 and discussed in the following sections.

### **5.1 FACTORS RELATED TO SOIL PATHWAYS**

The PEA Guidance Manual (DTSC, 1994 second printing 1999) requires that the risk/hazard due to exposure to soil be calculated as part of the PEA process. The exposure routes for soil addressed in this PEA are dermal contact and incidental ingestion of soil by a child and by an adult. As provided for by the PEA Guidance Manual, a residential exposure scenario was used. In the adult, incidental soil ingestion may occur during outdoor work that raises dust, such as construction. Dermal absorption may occur by dust particles adhering to exposed skin. Young children may ingest soil during outdoor activities and dermal absorption may occur in a similar manner as experienced by adults. The PEA Guidance Manual provides guidance on the amount of soil, which will be ingested and absorbed to the skin by both the child and adult daily.

#### **5.1.1 SITE TOPOGRAPHY**

The U.S. Geological Survey (USGS) (USGS, 1978) topographic map of the Van Nuys quadrangle indicates that the site has a surface elevation of approximately 700 feet above mean sea level (msl). The surface topography of the subject area is gently sloping to the south at the proposed school site. Surface-water runoff generally flows primarily toward the south, with lesser amounts of runoff to the east and west, where it is directed to storm drain inlets in the curbs of the surrounding streets. Figure 1 shows the topography within the region of the subject property.

#### **5.1.2 PROXIMITY TO SURFACE WATER BODIES**

The nearest surface water feature is the Tujunga Wash, which is located approximately 1000 feet to the west. The Tujunga Wash is an improved concrete lined drainage channel, protected by fencing. Water flow in the channel is episodic, with flow occurring after rainstorms. Due to the limited access and location adjacent to the 710 Freeway, the Tujunga Wash is not considered a pathway.

### **5.1.3 EVIDENCE OF RELEASES TO THE ENVIRONMENT**

Based on review of available subsurface environmental assessment reports and investigations, documented releases of hazardous material in the environment were identified. These included the following:

- As discussed in section 3.3.1, soil samples collected at the Valley Plaza Shopping Center were found to have concentrations of PCE up to 19 parts per billion (ppb).
- During site inspections conducted during the Phase I (Earth Tech, 2001), oil staining was observed on concrete surfaces around the air compressor in the basement of the Sears Auto Center.

No other evidence of a release was identified.

### **5.1.4 SITE GEOLOGY AND SOIL TYPES**

The proposed school site is located within the Transverse Ranges Geomorphic Province of California. Structurally the site is located in the northwestern block of the Los Angeles basin and is bounded on the north by the San Gabriel and Santa Susanna Mountains, on the east by the Verdugo Mountains, on the west by the San Fernando Basin and on the south by the Santa Monica Mountains. The soils underlying the proposed school site are classified as Quaternary alluvium formed in the Cenozoic Era (P. G. Schruben, R.E. Arndt and W.J. Bawiec, *Geology of the Conterminous U.S.*, 1994).

Based on the California Department of Conservation, California Geologic Survey (formerly called the Division of Mines and Geology), Seismic Hazard Zone Map for the Van Nuys Quadrangle, the subject property lies on the northern margin of a potential liquefaction zone. A potential liquefaction zone is defined as an area where historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

The site is located approximately three miles southwest of the Verdugo Fault, four miles north of the northern most extent of the Santa Monica Fault Zone (north side of the Santa Monica Mountains) and approximately eight miles southeast of the Northridge Hills fault.

Based on the lithology encountered during the field investigation, fill soils exist to approximately nine feet bgs in the vicinity of the former UST pit area. Below the fill soils the lithology consists of moist,

loose to medium dense sand and silt to the maximum depth drilled of 35 feet bgs. This description is in general agreement with a Geotechnical Investigation Report (Geotechnical Professionals, 2001), where soils consisted of moist, loose to medium dense silty sands to a depth to of 50 feet bgs. Boring logs from the PEA field investigation are included in Appendix B.

## **5.2 FACTORS RELATED TO WATER PATHWAYS**

The PEA Guidance Manual (DTSC, 1994 second printing 1999) requires that incremental risk/hazard due to the groundwater pathway be calculated. The potential release of contaminants in groundwater and subsequent volatilization, transpiration, and upward migration ultimately could impact soil, outdoor air, and indoor air provided that groundwater is near the surface, a release mechanism occurs, and a pathway exists.

The groundwater pathway was not evaluated in this report because soil test results did not show impacted subsurface soils beyond 20 feet bgs, and during the geotechnical investigation, groundwater was not encountered to the total depth of 50 feet bgs.

### **5.2.1 GROUNDWATER PATHWAY**

#### **5.2.1.1 Site Hydrogeologic Setting**

The site is located in the eastern portion of the San Fernando Groundwater Basin. Groundwater occurs in three principal water-bearing formations in the San Fernando Groundwater Basin: the Pleistocene Saugus Formation (including upper Pliocene Sunshine Ranch beds), Late Quaternary older alluvium (including Pacoima Formation and terrace deposits), and Holocene Alluvium.

The water-bearing portion of the Saugus Formation formation consists of light-colored, poorly sorted, loosely consolidated conglomerate and coarse sandstone, which were deposited as fluvial and alluvial fan sediments. The water-bearing capacity of the formation is somewhat lower than the older alluvium (terrace deposits).

The older alluvium (terrace deposits) was derived from deposits left by modern streams in earlier cycles of erosion with the source areas little different from the present streams. Lithologically, the materials of the older alluvium and terraces are broadly similar, consisting of brown to grayish, dirty, unsorted, angular to subangular detritus, entirely of local origin. There are numerous depositional breaks, during

which extensive weathering of materials took place, resulting in the forming of horizons of ancient soils. Consolidation is poor, and the deposits are only locally cemented.

The water-bearing character of these deposits is variable, depending on the source area. The site is less than one mile east of the Tujunga Wash of Little Tujunga Creek, which deposited an alluvial cone consisting almost entirely of coarse crystalline debris from the Verdugo Mountains to the north.

Holocene deposits in the area of the site consist of predominately coarse, thick accumulations of boulder, gravel, and sand in coalescing alluvial fans, becoming finer grained farther from the canyon mouths.

The upper Los Angeles River Area Watermaster report, dated May 1999 was consulted for groundwater data in the vicinity of the subject property. Based on data from the Watermaster report groundwater flows in an east-southeasterly direction. The LADWP and adjoining water purveyors actively manage the San Fernando Groundwater Basin resource. Groundwater is extracted from the eastern part of the basin and utilized for potable supply. The closest individual private well producer to the subject property is the Allied Signal Aerospace well, located approximately one mile to the northeast, upgradient, of the site. The nearest municipal well field to the subject property is the North Hollywood well field, managed by LADWP located approximately 1/2 mile north of the subject site. On the order of 20,000 acre-feet of groundwater is produced annually from the North Hollywood Field by the Department of Water and Power.

Depth to first groundwater is estimated to be greater than 50 feet bgs based on data from the Geotechnical Investigation performed on behalf of the LAUSD. During the geotechnical investigation, groundwater was not encountered to the total depth of 50 feet bgs. The geotechnical report indicates that historical data has shown groundwater in the vicinity of the subject property to be as shallow as 25 feet bgs. Groundwater gradient is estimated to be to the south.

Depth to water information from wells 3811E and 3800D was obtained from the Los Angeles County Public Works Department, Hydrologic Records Division. Depth to water in well 3811E, located 0.5 miles east of the site was measured on March 24, 2001 at 214.9 feet bgs. Depth to water in well 3800D, located 0.35 miles north of the site was measured on April 28, 2001 at 237.3 feet bgs.

The site is located to the west of the North Hollywood NPL site. The North Hollywood NPL site is an area of intensive investigation and remediation to address chlorinated solvent impacted groundwater in



the eastern portion of the San Fernando Valley. The site is several thousand feet west of the western boundary of the North Hollywood NPL site. Appendix C contains the trichloroethene (TCE) and tetrachloroethene (PCE) contamination map for shallow groundwater in the San Fernando Valley Basin.

#### **5.2.1.2 Impacted Aquifers From Site Releases**

Based on the reported depth to groundwater and the results of previous and current reports and investigations, no evidence has been found indicating a release or threatened release from the site to groundwater. Therefore, the aquifers are not known or suspected to be impacted from activities at the site.

### **5.3 FACTORS RELATED TO AIR PATHWAYS**

The PEA Guidance Manual (DTSC, 1994 second printing 1999) requires that incremental risk/hazard due to the air pathway be calculated. Volatilized constituents and non-volatile constituents bound to dust particles are the two exposure mediums comprising the air pathway. The potential release of volatile organic compounds (VOCs) in soil gas could impact outdoor air and indoor air at the future school site. Therefore, soil gas measurements were performed, and the potential impact of inhalation of volatilized constituents was evaluated using the DTSC's latest soil gas screening version of the Johnson and Ettinger model. Inhalation of outdoor air particulates (i.e., dust) potentially bound to non-volatile constituents was evaluated using the non-VOC inhalation algorithms provided in the PEA Guidance Manual

There is no documentation of a release of hazardous substance to the atmosphere and no known air emissions at the site. However, as discussed in Section 6, detected concentrations of VOCs detected in soil gas are limited to trace to low concentrations in a few samples. Therefore the potential for releases of hazardous substances from the site to the atmosphere is considered to be minimal.

## **6.0 SAMPLING ACTIVITIES AND RESULTS**

The field sampling investigation consisted of three phases: a geophysical survey, a soil gas sampling investigation, and a soil sampling investigation. Sampling locations are depicted in Figures 3 and 4.

### **6.1 GEOPHYSICAL SURVEY/SITE CLEARANCE**

Prior to drilling activities, a geophysical survey was conducted by Spectrum Geophysics, Incorporated (Spectrum). The purpose of the geophysical survey was look for subsurface structures (USTs, clarifiers, septic systems, pipelines, utilities, etc.) and to clear the proposed soil gas and soil boring locations. A combination of ground penetrating radar (GPR), magnetometer, and electromagnetic induction (EM) was employed during the survey.

To investigate the former UST area a specific geophysical survey was performed at the location of the former USTs. The former USTs and surrounding area was investigated for buried tanks. Results of the geophysical survey indicted that the vent lines terminated at the former UST pit area and there were no indications that any USTs remain in place. The geophysical survey summary report is included in Appendix F. Results of the geophysical survey were obtained prior to implementation of the field program to allow for possible modifications and adjustments based on the data received. No anomalies were reported in the former UST area and no significant modifications to the locations of soil or soil gas locations were necessary.

Additionally, prior to the commencement of soil and soil gas drilling activities, Underground Service Alert (USA) was notified of intent to conduct subsurface investigations at least 48 hours prior to the initiation of intrusive field tasks. All proposed locations of subsurface investigation were clearly marked with white paint as required by USA. USA contacted all utility owners of record within the site vicinity and notified them of the intent to conduct subsurface investigations in the proximity to buried utilities. All utility owners of record, or their designated agents, were expected to clearly mark the position of their utilities on the ground surface through out the area designated for investigation.

## **6.2 SOIL GAS SAMPLING AND ANALYSIS**

### **6.2.1 SAMPLING LOCATIONS AND RATIONALE**

Sampling for soil gas was conducted at 21 locations (SG-1 through SG-21). The sampling locations were placed in and around the Sears Auto Center and in the asphalt-paved parking lots immediately east and west of the Valley Plaza shopping center. At each location, soil gas samples were collected at depths of 10 and 20 feet bgs, except location SG-11 (in the former tank pit), where refusal was encountered at nine feet bgs (three attempts were made in a five-foot diameter area, with refusal encountered at nine feet in all locations).

The sampling strategy described in the following sections is based on a biased and random sampling strategy. The biased samples were located near or within areas identified to pose a PEC and the random samples were located to provide spatial coverage throughout the site. The soil gas sampling locations are shown in Figure 3.

Each soil gas sample was analyzed in an onsite mobile laboratory by a Centrum Analytical Laboratories, Inc. (Centrum) of Signal Hill, California, for VOCs following EPA Method 8260. The mobile laboratory operated in accordance with the LARWQCB Guidelines, Interim Guidance for Active Soil Gas Investigation, dated February 25, 1997.

Duplicate soil gas samples were collected for both on-site and offsite analysis. A total of four duplicate soil samples were collected in the same manner as the field samples at randomly selected sampling locations. A total of eight soil gas samples were collected in Summa Canisters for off-site confirmation analysis. Samples collected for off-site analysis were analyzed by Calscience Environmental Laboratories (Calscience), a State Department of Health Services (DHS) Environmental Laboratory Accreditation Program (ELAP) certified fixed laboratory for VOCs using EPA method TO-14A. In addition, methane was analyzed at the fixed laboratory on four samples using EPA Method SCAQMD Method 25.1.

### **6.2.2 SAMPLE COLLECTION PROCEDURES**

Soil gas sampling probe installation was conducted by Environmental Support Technologies, Inc. (EST) of Laguna Hills, California and soil gas sampling was conducted by Centrum. A description of the sample collection procedures is provided below.

**Probe Installation:** Stainless-steel probes and expendable tips were driven into the ground using either a percussion hammer or a hydraulic ram. The probe rod was advanced to the desired depth (10 and 20 feet bgs) where a section of Nylaflow™ tubing with a threaded tip was inserted through the rod to the bottom of the borehole and screwed to the sampling port. The probe was then removed from the borehole, leaving the Nylaflow™ tubing with a threaded tip in the borehole. The bottom six inches of the tubing had been pierced in several locations to allow for the free flow of soil gas from the formation to the surface, where samples were then taken.

Once the Nylaflow™ tubing was in place, clean sand was poured around the perforated section of tubing to allow for diffusion of soil vapors. The remaining annulus was filled with hydrated bentonite/cement slurry to three inches below grade.

**Purge Testing:** Purge testing was conducted at the beginning of the soil gas investigation to evaluate the appropriate purge volume to use during the investigation, per LARWQCB protocol. It was determined that three purge volumes would be removed prior to sampling.

**Sample Collection:** Soil gas samples were collected at each location using a system constructed of stainless steel, glass, Nylaflow™ tubing, and Teflon™ components. A calibrated flow meter and vacuum gage was connected to the Nylaflow™ tubing to measure the vacuum integrity of the soil gas sampling system prior to sample collection. Soil gas was purged using a peristaltic pump at approximately 100 milliliters per minute. Once the required volume of air was removed from each soil gas point a soil gas sample was collected. For analysis in the field, each soil gas sample was collected using a glass syringe fitted with a disposable needle and Mininert™ gas-tight valve. The soil gas samples were immediately transferred to the mobile lab for direct injection into a gas chromatograph for analysis of VOCs, as described in Section 6.1.1 above.

To test for leakage of ambient air intrusion, tracer gas (hexane) testing was conducted at a minimum of 10% of the soil gas locations. The tracer gas test was conducted by wrapping a hexane-coated rag around the soil gas probe at the ground surface. If hexane was detected in the soil gas sample analyzed by the mobile laboratory, additional measures were taken to seal the soil gas sample point and another soil gas sample was collected. Hexane was detected at one location (Sample SG-18-10) in the Sears Auto Center western service building. It is believed that the hexane detection resulted from inadequate ventilation in the service bay causing the sampling container to become affected when the operator walked into the service bay near the sampling point. The service bay doors were opened allowing more ventilation and



more bentonite was placed in the annulus around the sampling point and the location retested for hexane and re-sampled (Sample SG18-10R). No hexane was observed during the second sampling event.

Eight soil gas samples were collected for VOC analysis at the fixed laboratory (SG-4-10, SG-4-20, SG-10-10 and SG-10-20 SG-11-9, SG-14-20, SG-15-10, and SG-15-20). Samples SG-4-10, SG-4-20, SG-10-10 and SG-10-20 were also analyzed for methane. These samples were collected in Summa canisters following purging by attaching the Nylaflow™ tubing directly to the canisters using an appropriate fitting and opening the valve of the canister, which was under negative pressure. The samples were submitted to Calscience for analysis of VOCs and methane as described in Section 6.1.1 above.

Upon completion of the sampling, a machine screw was inserted in to the end of the tubing, the tubing folded back into the borehole, and the borehole was filled with concrete to grade.

### **6.2.3 SAMPLE HANDLING PROCEDURES**

As noted above, the soil gas samples collected in a syringe by Centrum were immediately transferred to the mobile lab for direct injection into a gas chromatograph for analysis of VOCs.

To identify and manage the Summa canisters collected in the field, a sample label was affixed to each canister. Each sample label included the following information: Project number; Site name; Sample identification number; Sampler's initials; and, Date and time of collection.

Following collection and labeling, samples were delivered to Calscience for analysis. COC records were used to document sample collection and shipment to laboratory for analysis.

### **6.2.4 SOIL GAS ANALYTICAL PROCEDURES**

Onsite analytical services for the soil gas survey were provided by Centrum. Centrum's mobile laboratory facilities have undergone the LARWQCB WIP approval process for soil gas surveys. EPA Method TO-14A and SCAQMD Method 25.1 analyses were provided by Calscience. Calscience was instructed to report estimated values between the method detection limit and reporting limit and "J"-flag each estimated value.



## 6.2.5 SOIL GAS ANALYTICAL RESULTS

The following sections summarize the results of the soil gas testing program. A summary of the analytical results of the soil gas samples is included in Tables 1 and 2. The laboratory reports and chain-of-custody documentation are included in Appendix D.

The following tables within this section present only those compounds detected by their respective analysis. If other compounds exist within a particular analyte list and were not listed in the table, then they were not detected.

### 6.2.5.1 VOC Analysis Using EPA Method 8260B

Only one VOC was detected, PCE at a maximum concentration of 1.5 micrograms per liter (Mg/L), in the 48 soil gas samples (including duplicates and purge volume tests) analyzed in the mobile laboratory using EPA Method 8260B.

### 6.2.5.2 VOC Analysis Using EPA Method TO-14A

Eight soil gas samples were collected in Summa canisters for analysis at a fixed-base laboratory. VOCs were detected in all eight samples analyzed by EPA Method TO-14A. For consistency with the mobile laboratory analysis results, the EPA Method TO-14A results [(ppbv/v)] were converted to units of µg/L. The following table summarizes the minimum and maximum concentrations of detected VOCs. No other VOCs were detected.

VOCs	Number of Detections	Minimum Concentration (µg/L)	Maximum Concentration (µg/L)
Dichlorodifluoromethane	7	0.0046	0.0754
Trichlorofluoromethane	4	0.0039	0.1713
1,1,1-Trichloroethane	5	0.0049	0.0078
Benzene	4	0.0023	0.0062
Toluene	8	0.0146	0.0996
Trichloroethene	2	0.0076	0.0207
Tetrachloroethene	8	0.0296	5.7896
Ethylbenzene	8	0.0119	0.2957
p/m-Xylene	8	0.0662	1.1473
Styrene	1	0.0042	0.0042
o-Xylene	8	0.0278	0.4854
1,3,5-Trimethylbenzene	7	0.0055	0.1399
1,2,4-Trimethylbenzene	8	0.0130	1.8485

### **6.2.5.3 Methane Analyses**

Methane, ranging from 1.0 to 1.1 ppmv, was detected in 3 of the 4 soil gas samples analyzed at the fixed-base laboratory using SCAQMD Method 25.1. The detection limit was 1 ppmv.

## **6.3 SOIL SAMPLING AND ANALYSIS**

### **6.3.1 SOIL SAMPLING LOCATIONS AND RATIONALE**

Soil sampling was conducted at 34 onsite locations (SB-1 through SB-34). A total of 127 soil samples were collected and 98 samples were analyzed as described below. Archived samples were sent to the laboratory and held pending results of the analyzed shallower samples. The sampling locations are shown in Figure 4.

The sampling strategy described in the following sections is a biased sampling strategy. The biased samples were located near or within areas identified to pose a PEC.

### **6.3.2 SAMPLE COLLECTION PROCEDURES**

Subsurface soil samples were collected in a two-inch diameter, push-probe core sampler. The push-probe system is driven by a hydraulic hammer. Discrete soil samples were collected using a 24-inch long, two-inch diameter split-spoon sampler. Upon reaching the desired depth, the drive tip was removed from the rods, a split-spoon sampler attached and the sampler advanced 24-inches into the soil to collect the sample. Samples were collected in 6-inch long, 1.5-inch diameter stainless-steel sleeves. Selected sleeves were then sealed with Teflon<sup>TM</sup> squares and polyurethane caps, immediately placed in a chilled container pending delivery to the laboratory. The remaining soil was used for lithologic descriptions and headspace readings with a PID.

Soil samples collected in the basement of the Sears Auto Center at soil boring SB-29 were collected using a hand auger and drive sampler. Subsurface soil samples were collected with a drive sampler following use of a 2.5-inch diameter hand auger to reach the desired sampling depth. Once the desired sample depth was reached, the hand auger was removed from the borehole and a sample collected using a manually driven core sampler lined with a 1.5-inch diameter stainless-steel sample sleeve. The core sampler was driven approximately 6 inches into the base of the hand-augured boring with a slide hammer. Upon retrieval, soil samples were removed from the sampler, sealed with Teflon<sup>TM</sup> squares and polyurethane caps, immediately placed in a chilled container pending delivery to the laboratory.

Chain-of-Custody documentation accompanied the samples during all phases of the field investigation and delivery to the laboratory.

#### **6.3.2.1 Soil Description**

During drilling operations, boring logs were completed for each soil boring. Each log recorded the following sampling information: boring number and location; sample identification numbers; date and time; sample depth; lithologic description in accordance with the Unified Soil Classification System (USCS); description of any visible evidence of soil contamination (i.e., odor or staining), and PID readings. Boring logs are provided in Appendix B.

A Photovac 2020IS photo-ionization detector (PID) was used for both field screening and health and safety monitoring during soil sampling activities. PID headspace data were used as an immediate indicator of volatile organic vapors in subsurface materials.

The PID was calibrated to display concentration in units equivalent to parts per million (ppm). A span gas containing hexane at 100 ppm in air was used to set the sensitivity. The instrument was calibrated at a minimum of once per day.

#### **6.3.2.2 Decontamination**

All equipment that came into contact with potentially contaminated soil was decontaminated to assure the quality of samples collected. Disposable equipment intended for one-time use was not decontaminated, but packaged for appropriate disposal. Decontamination occurred prior to and after each use of a piece of equipment. All drilling and sampling devices used were decontaminated in a pre-designated area using the following procedures;

- Non-phosphate detergent and tap water wash, using a brush;
- Tap-water rinse, using a brush; and
- Final tap-water rinse, using a brush.
- Air drying

#### **6.3.2.3 Collection of Field Equipment Blank Samples**

Field equipment blank samples were prepared for each day of sample collection. The field equipment blank samples were collected by pouring laboratory-provided, organic-free water over decontaminated

drilling equipment, such as the split-spoon sampler. The water was collected in laboratory-provided water sampling containers. The containers were handled in the same manner as other samples (i.e., placed in a cooler with ice and identified on the COC) and delivered to Calscience for analysis with other samples collected the same day.

### **6.3.3 SAMPLE HANDLING PROCEDURES**

Sample containers consisted of new, clean stainless-steel sleeves and laboratory-provided water sample containers for equipment blank samples. To identify and manage samples obtained in the field, a sample label was affixed to each sample container. The sample labels included the following information: Project number; Site name; Boring number; Sample identification number; Sampler's initials, and; Date and time of collection.

Following collection and labeling, samples were immediately placed in a sample cooler for temporary storage. The following protocol was followed for sample packaging:

- Sample containers were placed in clear, plastic, leak-resistant bags prior to placement in the ice chest.
- Ice was placed in leak resistant plastic bags and included in the coolers to keep samples at a chilled temperature during transport to the analytical laboratory. When ice was used, the drain plug of the cooler was secured with duct tape to prevent melting ice from leaking out of the cooler.

### **6.3.4 SOIL ANALYTICAL PROCEDURES**

Offsite analytical services were provided by Calscience. The laboratory was instructed to report estimated values between the method detection limit (MDL) and reporting limit and "J"-flag each estimated value.

A total of 98 soil samples were analyzed at Calscience for one or more of the following:

- Total Petroleum Hydrocarbons (TPH) following EPA Method 8015M,
- Semi-volatile organic compounds (SVOC) following EPA Method 8270C,
- Polychlorinated biphenyls (PCBs) following EPA Method 8082,
- California Code of Regulations (CCR) Title 22 Metals following EPA Method 6000/7000,
- Pesticides following EPA 8081, and



- pH according to EPA Method 9045C.
- Three (3) water samples (field equipment blanks) were analyzed for SVOCs using EPA Method 8270C.

In addition, four soil samples were collected between 1 and 5 feet bgs and analyzed for physical parameters including moisture (ASTM D 2216); porosity (American Petroleum Institute [API] Method RP 40); bulk density (ASTM D 2937); and total organic carbon content (Walkley&Black Method).

Field samples were collected by Earth Tech in accordance with the DTSC-approved field sampling plan (FSP) prepared as part of the PEA work plan (Earth Tech, December 2001) with the following exceptions:

- There was refusal at SB-21, at 3.5 feet bgs. Only the 0.5 foot bgs sample (SB-21-0.5) was collected at that location. Boring SB-21A was drilled 3 feet northwest of SB-21, where the 7, 10, and 12 feet bgs samples were taken.
- There was refusal at SG-11 and SB-6, at 9 feet bgs. Three additional attempts made in an approximate 5 foot area, all of which encountered refusal at 9 feet bgs. Refusal was at equal depths, suggesting a planar feature at this depth. Two soil samples were recovered at this location SB-6-5 and SB-6-9 and two soil gas samples were collected, SG-11-9 and SG-11-9D.
- Deionized water, not high-performance liquid chromatography (HPLC) solvent-free water, was used to collect equipment rinsate samples by Earth Tech for organic analyses.
- Deionized water was not available on January 23, and February 1, 2002. Consequently, equipment rinsate samples were not collected on those days.

#### **6.3.5 SOIL ANALYTICAL RESULTS**

A summary of soil analytical results is provided in Tables 3 through 9. The laboratory reports and chain-of-custody documentation is included in Appendix D.

The following tables within this section present only those compounds detected by their respective analysis. If other compounds exist within a particular analyte list and were not listed in the table, then they were not detected.



### 6.3.5.1 Metals

A total of 82 soil samples (including duplicates) were analyzed for metals using EPA Methods 6010B and 7471A. Each of the Title 22 metals was detected in soil at the site. The following table identifies the range of concentrations found in the soil samples collected.

Metals	Detections	Concentration (mg/kg)	Concentration (mg/kg)
Antimony	25	0.207J	1.56
Arsenic	33	0.133J	1.75
Barium	78	30.9	315
Beryllium	78	0.0619J	0.583
Cadmium	77	0.0191J	0.941
Chromium (Total)	78	2.13	45.6
Cobalt	78	2.12	14
Copper	78	2.72	51.4
Lead	78	0.828	39.3
Mercury	68	0.0130J	0.245
Molybdenum	50	0.0209J	1.58
Nickel	78	2.07	17.9
Selenium	12	0.229J	1.64
Silver	3	0.0305J	0.111J
Thallium	0	—	—
Vanadium	78	6.6	64.6
Zinc	78	10.8	202

Background soil samples were not collected at the site. Analytical results from soil samples collected at nearby Francis Polytechnic High School (approximately 2 miles north of the site), were used as background soil sample data for metals. Table 10 presents the background metals results.

### 6.3.5.2 SVOCs by EPA Method 8270C

A total of 79 soil samples were analyzed for SVOCs. Of this data set twelve separate SVOCs were detected in one sample. Sample SB-21-0.5 was reanalyzed to confirm the concentration (SB-21-0.5R) and then a composite sample (SB-21-0.5H) was prepared from sample SB-21-0.5 and analyzed again. All three samples had detectable concentrations of SVOCs. The specific compounds and range of concentrations detected are as follows:

SVOCs	Number of Detections	Minimum Concentration (Mg/Kg)	Maximum Concentration (Mg/Kg)
Phenanthrene	3	0.42	1.6
Anthracene	3	0.13J	0.54
Fluoranthene	3	3.3	14
Pyrene	3	3.4	14

Benzo (a) Anthracene	3	3.0	13
Chrysene	3	2.9	13
Benzo (k) Fluoranthene	3	2.6	11
Benzo (b) Fluoranthene	3	2.8	12
Benzo (a) Pyrene	3	2.7	12
Indeno (1,2,3-c,d) Pyrene	3	1.2	4.7
Dibenz (a,h) Anthracene	3	0.42	1.6
Benzo (g,h,i) Perylene	3	1.0	4.2

#### 6.3.5.3 Pesticides by EPA Method 8081A

A total of 10 samples were analyzed for pesticides. Of this data set three separate pesticides were detected (including primary and duplicates). The specific compounds and range of concentrations detected are as follow:

Pesticides	Number of Detections	Minimum Concentration ( $\mu\text{g /kg}$ )	Maximum Concentration ( $\mu\text{g /kg}$ )
4,4'-DDE	2	2.1	3.4
4,4'-DDD	1	3.1	3.1
4,4'-DDT	4	2.9	19

#### 6.3.5.4 TPHs by Modified EPA Method 8015

TPH, ranging from 0.81 to 370 mg/kg (total carbon range C7 through C36), was detected in 2 of the 25 soil samples analyzed for TPH. TPH was not detected below the range of C19 in any of the samples.

#### 6.3.5.5 PCBs by EPA Method 8082

PCBs were not detected in any of the 16 samples analyzed for PCBs.

#### 6.3.5.6 pH by EPA Method 9045C

pH was detected at 4.12 and 5.84 in the two samples analyzed for pH.

#### 6.3.5.7 Soil Physical Properties

Analyses including moisture content, bulk and grain density, effective and air-filled porosity, TOC, permeability and hydraulic conductivity were conducted for use in the Human Health Screening Evaluation (Section 7). The results of the soil physical properties testing are presented in Appendix E.

## 7.0 HUMAN HEALTH SCREENING EVALUATION

A health risk screening was conducted in accordance with the PEA Guidance Manual (DTSC, 1994 second printing 1999) procedures for human health evaluation. As stated by the DTSC, the goal of the screening process is to provide risk managers with an estimate of the potential chronic health hazards that could arise due to exposure to chemicals at the site. Because of the simplified nature of the exposure assumptions incorporated into the PEA procedure, the results are not absolute estimates of the risks or hazards at a site, but rather are health-conservative estimates. As a result, the PEA procedure tends to overestimate potential health hazards and cancer risks rather than underestimate them. Consequently, if the PEA results suggest that cancer risks and non-carcinogenic health hazards are below levels of concern, no further risk assessment or investigation is generally warranted. The following sections discuss the potential risks to humans via exposure to chemicals of potential concern (COPCs) in site soil and air at the proposed East Valley Middle School No. 1. The results of the human health screening evaluation are presented in Tables 11 through 26.

The results of this health risk assessment estimated a site cancer risk of  $8.0\text{E-}4$  and a site hazard index of  $6.8\text{E-}2$ . The site hazard index is below the commonly used hazard index limit of 1.0. The estimated risk of  $8.0\text{E-}4$  was due solely to the concentrations of semi-volatile organic compounds (SVOCs) that were found in one soil boring (SB-21). Assuming that exposure to the SVOCs in the area confined to SB-21 can be mitigated such that the cancer risk is negligible, the resultant site cancer risk would result entirely from the potential inhalation of volatile organic compounds (VOCs) in indoor air. This resultant site cancer risk is  $1.5\text{E-}6$ . This risk value is approximately equivalent to the cancer risk level of  $1\text{E-}6$ .

### 7.1 EXPOSURE PATHWAYS AND MEDIA OF CONCERN

The PEA investigation analytical results collected by Earth Tech indicated that the COPCs and media of concern are SVOCs and pesticides in soil, and organic compounds in soil vapor. As indicated in the conceptual site model (Figure 5), the primary sources for the COPCs have not been positively identified, but former underground storage tanks (USTs) and possibly waste oil clarifiers used on-site could potentially be a source of VOCs in soil vapor. As discussed in Section 5.0, potential exposure routes include ingestion, inhalation, and dermal contact.

As discussed in Section 5, the groundwater pathway was judged to be incomplete, and therefore not evaluated as a potential exposure pathway.

### **7.1.1 POTENTIAL EXPOSURE RECEPTOR POPULATIONS**

Because the PEA is a conservative assessment of potential exposure and risks, residents are evaluated, as the receptor population of concern. Risk values incorporate exposure factors for both adults and child populations. This population is assumed to be living on the site 24 hours a day for 24 years as adults and 24 hours a day for 6 years as children.

At the proposed school site, the actual receptor populations are students on-site during the school day, and teachers and other support staff at the school. These populations are anticipated to be at the school for a much shorter frequency and duration of exposure thereby limiting the amount of time exposed to site contaminants.

## **7.2 CHEMICALS OF POTENTIAL CONCERN AND EXPOSURE POINT CONCENTRATIONS**

The methodologies used by Earth Tech to determine the COPCs are described in the following sections.

### **7.2.1 CHEMICALS OF POTENTIAL CONCERN FOR SOIL PATHWAYS**

Earth Tech identified two soil exposure pathways that could affect residential receptors at the proposed school site: dermal contact and oral ingestion. Organic compound COPCs were identified as any organic chemicals detected at least once in soil samples. For health risk screening purposes, maximum concentrations for each chemical were selected from soil samples collected in the depth interval from ground surface to 10 feet (depths at which contact could occur). Soil sample analytical results are summarized in Appendix D. Based on the above selection criteria, a total of 17 chemicals were identified – three pesticide residues and 14 SVOCs.

Background soil samples for metals analysis were not collected at the site. Instead, metal concentrations reported in site soils were compared to background soil metals data from the Francis Polytechnical School site. This school site is located approximately 2 miles north of the site. Soils at the Francis Polytechnical School site are similar to soils at the proposed East Valley School No. 1 site for the following reasons:

- Both sites have shallow soils deposited from the Tujunga Wash alluvial fan/flood plain.
- The source of the alluvial material is the same.
- Both sites are within similar residential and commercial settings.



Therefore, metals data from the Francis Polytechnical School site are considered to be representative of background conditions within the area occupied by the proposed East Valley School No.1 site.

Earth Tech performed an evaluation of background metals in soil in accordance with the PEA Guidance Manual (DTSC, 1994 second printing 1999). Table 11 presents the maximum, and average background concentrations; and the maximum, average, and 95 percent upper confidence limit on the arithmetic mean (95% UCL) concentrations for samples collected from the proposed school site. Measured metal concentrations in soil samples from the proposed school site were considered to be within background levels if either the maximum or the average detected on-site concentrations were less than the maximum background soil concentration. Using the data provided in Table 11, all metal concentrations detected at the site were deemed to be within background concentrations. Therefore no metal COPCs were identified.

In accordance with the PEA Guidance Manual (DTSC, 1994 second printing 1999), lead should be evaluated in a PEA regardless of whether its concentrations are within background levels. However, the maximum lead concentration detected at the site (39.3 mg/kg) is significantly lower than the DTSC soil lead screening value of 255 mg/kg. Therefore, health risks posed by lead in soil at the site were not evaluated using the LeadSpread model as part of this PEA.

#### **7.2.2 CHEMICALS OF POTENTIAL CONCERN FOR THE AIR PATHWAY**

Cancer risks and non-carcinogenic health hazards for the inhalation pathway are based on either exposure to volatile emissions for VOCs or exposure to fugitive dust emissions for SVOCs and pesticides. As discussed for the soil pathway in Section 7.2.1, the COPCs selected to assess the inhalation of fugitive dust emissions were all of the SVOCs and pesticides detected at the site. In accordance with the PEA Guidance Manual (DTSC, 1994 second printing 1999), calculation of risk/hazard using either volatilization or fugitive dust adequately describes exposure to any given chemical; it is not necessary to do both. For the assessment of VOCs in breathing air, all 13 organic chemicals detected in soil-gas samples were modeled as COPCs transported from the subsurface into indoor air. The maximum detected soil gas concentrations were used as the exposure point concentrations. Maximum detected soil gas concentrations are summarized in Table 15. A complete summary of soil gas analytical results is presented in Appendix D.



## 7.3 TOXICITY VALUES

The toxicity assessment characterizes the relationship between the magnitude of exposure to a COPC and the nature and magnitude of adverse health effects that may result from such exposure. For purposes of calculating exposure criteria to be used in risk assessments, adverse health effects are classified into two broad categories — non-carcinogens and carcinogens. Toxicity values/exposure criteria are generally developed based on the threshold approach for non-carcinogenic effects and the non-threshold approach for carcinogenic effects. Toxicity values may be based on epidemiological studies, short-term human studies, subchronic or chronic animal data.

In this assessment, chronic toxicity criteria were selected (in order of preference) from the following sources: (1) Cal/EPA Cancer Potency Factors, (2) U.S. EPA's Integrated Risk Information System (IRIS) and U.S. EPA Health Effects Assessment Summary Tables (HEAST), as referenced in the U.S. EPA Region IX Preliminary Remedial Goals table.

### 7.3.1 CARCINOGENIC EFFECTS

Certain chemicals are regulated as carcinogens based on the likelihood that exposure may cause cancer in humans. Numerical estimates of cancer potency for these chemicals are presented as cancer slope factors (CSFs). The CSF defines the cancer risk due to constant lifetime exposure to one unit of a carcinogen (units of risk per mg/kg-day). CSFs are derived by calculating the 95%UCL on the slope of the linearized portion of the dose-response curve using the multistage cancer model on the study data. Use of the 95%UCL of the slope means that there is only a 5% chance that the probability of a response could be greater than the estimated value for the experimental data used. This is a conservative approach and may overestimate the actual risk given that the actual risk is expected to be between zero and the calculated value. Carcinogenic slope factors assume no threshold for effect, i.e. all exposures to a chemical are assumed to be associated with some risk. Table 12 and Table 13 present the CSFs used in this assessment and the sources from which they were obtained. Preference was given first to the use of CSFs listed in the Cal/EPA Cancer Potency database. If CSFs were unavailable from Cal/EPA, then they were obtained from the federal EPA's IRIS database, and if unavailable from this source, they were obtained from the federal EPA's HEAST database as referenced in the USEPA Region IX Preliminary Remedial Goals table.

### **7.3.2 NON-CARCINOGENIC EFFECTS**

For the purpose of assessing risk associated with non-carcinogenic effects, the USEPA has adopted a science policy position that protective mechanisms such as repair, detoxification, and compensation must be overcome before an adverse health effect is manifested. Therefore, a range of exposures exists from zero to some finite value (a threshold) that can be tolerated by the organism without appreciable risk of adverse effects occurring.

Non-carcinogenic effects were evaluated using reference doses (RfDs) developed by the USEPA. The RfD is a health-based criterion based on the assumption that thresholds exist for non-carcinogenic toxic effects. In general, the RfD is an estimate (with uncertainty) of a daily exposure to the human population that is likely to be without appreciable risk of chronic effects during a lifetime of exposure. RfDs are expressed as acceptable daily doses in milligrams of compound per kilogram of body weight per day (mg/kg-day). Most RfDs are based on oral exposure data. Table 12 and Table 13 present the RfDs and RfCs used in this assessment and the sources from which they were obtained. For inhalation RfDs and RfCs, preference was given first to the use of RfC values listed by Cal/EPA in their Chronic Relative Exposure Levels Database. Using these RfC values, RfDs were calculated by multiplying the RfC value by  $(20 \text{ cu m}/[70 \text{ kg} * 1,000 \text{ ug/mg}])$ . RfC values for 1,1,1-trichloroethane and tetrachloroethene were unavailable from the Chronic Relative Exposure Levels Database, but were available in DTSC's VLOOKUP table supplied with their Johnson and Ettinger Soil Screen model. Therefore, the RfD values for these two compounds were calculated from the RfC values supplied in the VLOOKUP table. Other RfC or inhalation RfD values that were unavailable from the above Cal/EPA sources were obtained from USEPA's IRIS database, or if unavailable, from the USEPA's HEAST database, as referenced in the USEPA's Region IX Preliminary Remediation Goals table.

Dermal absorption fraction values for organic chemicals in soil were taken from Table 2 of the PEA Guidance Manual (DTSC, 1994 second printing 1999).

### **7.4 SOIL GAS TO INDOOR AIR TRANSPORT MODELING**

The PEA procedures do not provide a method for evaluating soil-gas results. For this PEA analysis, Earth Tech modeled VOC transport from the subsurface to indoor air using the USEPA (2001) spreadsheet program for the Johnson and Ettinger vapor intrusion model as modified by DTSC/HERD in December

2001. DTSC entitled this program the "SG Screen" (soil gas screen) Version 1.0. Indoor air concentrations were modeled by Earth Tech using the maximum detected soil-gas concentrations.

The concentration of a chemical in indoor air is a function of the concentration of the chemical in the soil gas, physical/chemical properties of the chemical in the soil, attenuation factors, and the characteristics of the building. The SG Screen model uses default assumptions that pertain to the building characteristics, such as its size and air exchange rate. Physical/chemical properties of the VOCs that were not provided in the "VLOOKUP" table accompanying the model were obtained or calculated from chemical data provided on either the USEPA Region 9 Preliminary Remediation Goals website ([www.epa.gov/Region9/waste/sfund/prg/s4](http://www.epa.gov/Region9/waste/sfund/prg/s4)) or the National Institute of Standards and Technology (NIST) website (<http://webbook.nist.gov/chemistry/name-ser.html>). The chemicals for which physical chemistry values were supplied were: dichlorodifluoromethane; trichlorofluoromethane; 1,3,5-trimethylbenzene; and 1,2,4-trimethylbenzene.

Soil properties needed for input into the model are soil dry bulk density, total porosity and water-filled porosity. Earth Tech collected and tested three soil samples from the site to obtain site-specific data for these properties. Test results are presented in Table 8. The remaining model properties are based on the described soil type or model default values. As determined using the soil boring logs, the average soil type at the site was comprised of 73.5% sand and 25.5% silt (Appendix B). According to DTSC's Soil Selection Chart for J&E Indoor Air Modeling, these results are most consistent with a "Loamy Sand" (LS) soil type. Therefore, the "LS" soil type was used for all Johnson & Ettinger modeling. Table 14 summarizes the general parameters input into the model or added to the VLOOKUP table in the model.

Using the "LS" soil type, the model estimated the soil vapor permeability. The bulk density was determined to be 1.46 grams per cubic centimeter (g/cm<sup>3</sup>). The measured average total porosity is 0.457, which is within the sandy loam range. The average measured water content was 20.4 percent soil moisture, which is approximately 0.204 cubic centimeter per cubic centimeter (cm<sup>3</sup>/cm<sup>3</sup>) water filled porosity.

The EPA Johnson and Ettinger model is based on a residential scenario. The model default building was used (i.e., an enclosed space with a slab floor that is 15 centimeters [cm] thick). The model default values for space height (466 cm or 8 feet), floor-wall seam crack width (0.1 cm), and indoor air exchange rate (11.2 cu cm per sec) were used. The depth to the top of contamination was assumed to be the depth at

which each soil gas sample was collected. These depths varied between 9-20 ft bgs, as shown by the last two digits of the respective soil gas sample number (column 3 in Table 15).

Two sets of soil gas data were collected at the site. One set was analyzed using EPA Method 8260 analysis. PCE was the only VOC detected using this method (max 1500  $\mu\text{g}/\text{cu m}$ ). The second set was analyzed using EPA Method TO-14A. Eight soil gas samples were collected and analyzed using the TO-14A Method, and 13 VOCs were detected (max. PCE was 5,789  $\mu\text{g}/\text{cu m}$ ). Analytical results are presented in Appendix D. Because the TO-14A method is more sensitive, higher concentrations of PCE and more analytes were detected using this method, and the 8260 Method only detected PCE, maximum detected concentrations from the TO-14A results were used for Johnson & Ettinger soil gas modeling (Table 15).

The results of the Johnson and Ettinger model using the maximum concentration of each chemical in soil gas evaluated for indoor air are based on default input parameters and the site-specific input parameters (porosity, bulk density, water-filled porosity, estimated depth to contamination, organic carbon content, and soil type). In general, using the default values will result in higher indoor air concentrations and, thus, higher incremental risks. In addition, the site-specific parameters, which are moderate to highly sensitive model variables, have the following effect on the Earth Tech model results:

- The calculated water-filled porosity based on site-specific data is considered approximately average at 0.259  $\text{cm}^3/\text{cm}^3$ . The model default value is 0.30  $\text{cm}^3/\text{cm}^3$ . The lower the value, the greater the effect on indoor air concentrations.
- For modeling purposes, the depth to the top of soil contamination ranged from 9-20 feet bgs based on the sample depth at which the maximum VOC concentrations were detected. The shallower the depth, the greater the effect on indoor air.
- The average measured total porosity is 0.457, which is within the range for sandy loam. The model default value is 0.43. A higher value increases indoor air concentrations.
- Average soil bulk density is 1.46  $\text{g}/\text{cm}^3$ . A higher value decreases the effect on indoor air; however, soil bulk density has low sensitivity in the model.
- Based on boring logs, the soil was evaluated on a conservative basis as a sandy loam by Earth Tech.

For a complete discussion of the model assumptions and parameters, refer to the Johnson and Ettinger model (EPA, 1997). The results of the modeling are provided in Appendix E. Table 15 summarizes the



organic chemicals modeled, the chemical abstracts number for each chemical, its maximum concentration, and the sample containing the maximum concentration.

## 7.5 SOIL GAS TO OUTDOOR AIR TRANSPORT MODELING

Soil gas can migrate to outdoor air as well as to indoor air. The outdoor air pathway is a complete path and risks/hazards have been evaluated. The DTSC's PEA Guidance Manual (DTSC, 1994 second printing 1999) provides equations for estimating the emission rate and dispersion of subsurface VOCs to outdoor air. These equations were taken from an EPA Superfund guidance document, which has been revised since the PEA Guidance Manual (DTSC, 1994 second printing 1999) was published. The soil gas concentration was converted to an estimated soil VOC concentration using the following equation:

$$C_T = C_G [\theta_w + (n - \theta_w)K_H + (K_{oc}f_{oc})] / (\rho_b K_H)$$

Where:

$C_T$  total soil concentration (ug/kg)

$C_G$  soil gas concentration (ug/L)

$\theta_w$  soil water content by volume (dimensionless)

$n$  total soil porosity (dimensionless)

$K_H$  Henry's Law Constant (dimensionless)

$\rho_b$  dry bulk soil density (g/cu cm)

$K_{oc}$  organic carbon partition coefficient

$f_{oc}$  soil organic carbon content (dimensionless)

This equation was provided by the California Regional Water Quality Control Board-Los Angeles office in their Interim Guidance for Remediation of VOC Impacted Sites (January 1995). It is based on a partitioning model and relies on the fundamental assumption of chemical equilibrium between phases, and requires site-specific soil parameters. Table 15 shows the soil parameters and soil VOC



concentrations calculated using the above equation. Using the PEA screening equations for VOCs in ambient air, each calculated soil VOC concentration was used to calculate the health risk and health hazard values resulting from VOC exposure by inhalation of outdoor air. The same COPCs used for indoor air modeling were also used to evaluate the outdoor air pathway.

## 7.6 RISK CHARACTERIZATION SUMMARY

The objective of this section is to integrate information developed in the toxicity assessment and the exposure assessment sections into a complete evaluation of the current and future health risks associated with COPCs detected at the site. This risk assessment evaluates the nature and degree of health risks to hypothetical residential receptors at the site. Health hazard and risk estimates are derived for each COPC as well as for the combined effects that may result from exposure to all COPCs.

### 7.6.1 HUMAN CARCINOGENIC EFFECTS

Carcinogenic risk from both soil and soil-gas is estimated as the incremental probability of an individual developing cancer over a lifetime as a result of exposure to one or more of the COPCs. The non-cancer health hazard (expressed as the hazard quotient) is estimated by comparing the estimated exposure levels with the exposure level at which no adverse health effects are expected to occur as a result of chronic exposure (i.e., reference dose). Human health risk and hazard quotient evaluations were performed in accordance with the PEA Guidance Manual (DTSC, 1994 second printing 1999). Individual chemical cancer risks were estimated for soil using the following PEA equations:

For dermal contact and oral ingestion:

$$\text{Risk}_{\text{soil}} = (\text{SF}_o * C_s * 1.57\text{E-}06) + (\text{SF}_o * C_s * 1.87\text{E-}05 * \text{ABS})$$

Where:

$\text{SF}_o$	=	Oral slope factor
$C_s$	=	Concentration in soil
ABS	=	Skin absorption factor

For inhalation of outdoor air containing dust or VOCs:

$$\text{Risk}_{\text{soil}} = \text{SFi} * C_a * 0.149$$

Where: SFi = Inhalation slope factor  
Ca = Concentration in air (for dust  $C_a = C_s * 5 \times 10^{-8}$ ; for VOCs,  $C_a = [(\text{emission rate})/99]$  where the emission rate was calculated using the equation in Figure 2.6 of the PEA Guidance Manual)

The incremental cancer risk estimated to result from accidental ingestion of soil and dermal contact is presented in Table 16. The incremental cancer risk estimated to result from inhalation of outdoor air containing dust particles impacted by site-related chemicals is presented in Table 17. The incremental cancer risk estimated to result from inhalation of outdoor air containing site-related VOCs is presented in Table 23.

A total estimated carcinogenic risk is determined by summing all of the individual cancer risks. The health risk results are compared against DTSC's screening level risk value of one in one million

(1E-06) and EPA's acceptable risk range of 1E-06 to one in ten thousand (1E-04). If the total estimated risk is below 1E-06, the carcinogenic health risk to individuals under the given exposure conditions is deemed acceptable. If the estimated risk exceeds 1E-06, carcinogenic health risk to individuals under the given exposure conditions, the risk requires risk managers to balance risks with other criteria to assess the need for mitigation.

#### 7.6.2 HUMAN NON-CARCINOGENIC EFFECTS

USEPA's policy regarding non-carcinogenic chemicals differs from its policy for carcinogens (USEPA, 1989). With respect to non-carcinogens, it has been postulated that for systemic toxicity effects to occur, physiological, homeostatic, compensating, and adaptive mechanisms existing in humans must first be rendered inactive prior to any manifestation of a particular toxic response. USEPA's theory for non-carcinogens is that the toxic response has a "threshold" concentration above which toxic effects may occur.

The USEPA has established reference doses for several of the non-carcinogenic COPCs, which represent the dose of the chemical not expected to result in adverse health effects, even over a lifetime of exposure.

Individual chemical non-carcinogen hazard quotients for soil were estimated using the following equations:

For dermal contact and oral ingestion:

$$\text{Hazard}_{\text{soil}} = (C_s/\text{RfD}_o * 1.28 \times 10^{-5}) + (C_s/\text{RfD}_o * 1.28 \times 10^{-4} * \text{ABS})$$

Where:

$C_s$	=	Concentration in soil
$\text{RfD}_o$	=	Oral reference dose
$\text{ABS}$	=	Skin absorption factor

For inhalation of outdoor air containing dust or VOCs:

$$\text{Hazard}_{\text{soil}} = (C_a/\text{RfDi}) * 0.639$$

Where:

$C_a$	=	Concentration in air
$\text{RfDi}$	=	Inhalation reference dose

A hazard index was calculated as the sum of all hazard quotients. If the non-carcinogenic hazard index is less than 1.0, the non-carcinogenic health hazard to individuals under the given exposure conditions is deemed acceptable.

The hazard index estimated to result from accidental ingestion of soil and dermal contact is presented in Table 18. The hazard quotient estimated to result from inhalation of outdoor air containing dust particles impacted by site-related chemicals is presented in Table 19. The hazard quotient estimated to result from inhalation of outdoor air containing VOCs is presented in Table 24.

### 7.6.3 SOIL RISK CHARACTERIZATION

The total incremental cancer risk for hypothetical residential exposure to soil through direct contact (including incidental ingestion, dermal contact and inhalation of dust particles) was estimated to be  $8\text{E-}04$  (Table 20). The chemicals that contributed to more than 99.9 percent of the estimated incremental cancer risk were the carcinogenic SVOCs detected in soil sample SB-21-0.5. The lateral extent of SVOC impacted soil seems to be very limited as only one of 77 samples collected at the site contained detectable concentrations of SVOCs. In addition, factors, such as the presence of asphalt or buildings at the

proposed school (which reduce the potential for soil contact) or the likely removal of shallow soil during the demolition and construction phase of the project, are not considered when calculating health risk.

The estimated hazard index for hypothetical onsite receptors is presented in Table 20. The total hazard index for hypothetical residential exposure to site-related chemicals was estimated to be

2.7E-02. The estimated hazard index for the site is estimated to be below 1.0, the benchmark level for non-cancer effects.

#### **7.6.4 SOIL-GAS RISK CHARACTERIZATION**

To estimate health risks to individuals from exposure to indoor air, Earth Tech calculated the cancer risks and hazard quotients potentially resulting from exposure to organic compounds detected in soil gas. The organic chemicals listed in Table 15 were modeled using the Johnson & Ettinger soil screening program at the maximum concentrations detected in soil-gas samples. The Johnson & Ettinger model is a mathematical screening-level model that incorporates both convective and diffusive mechanisms for estimating the transport of contaminant vapors emanating from either subsurface soils or groundwater into indoor spaces located directly above or in close proximity to the source of contamination.

The total cancer risk and hazard index associated with exposure to affected indoor air were calculated to be 1.5E-6 (Table 21) and 0.04 (Table 22), respectively. The total hazard index for this pathway is below the level of regulatory concern (i.e., 1.0). The cancer risk is considered acceptable because it is approximately equal to the risk criterion of 1E-6. Also note that the use of the maximum detected soil gas concentrations provides a conservative estimate of associated cancer risks and health hazards. Furthermore, assuming that a resident resides at the site 24 hours per day for 30 years also provides a conservative estimate of the chemical exposure. Johnson & Ettinger model outputs are presented in Appendix E.

In order to utilize all soil gas data obtained, and to estimate health risks due to inhalation of VOCs using a more realistic exposure point concentration, soil gas data obtained using EPA Method TO-14A and EPA Method 8260 were combined and the 95% upper confidence limit (95% UCL) from the mean was derived for each averaged VOC concentration (Table 26). Non-detect results were replaced with one-half the detection limit for the respective VOC. The 95% UCL values were used as exposure point concentrations and were input into the Johnson and Ettinger Soil Screen modeling program to estimate health risks



resulting from inhalation of VOCs in indoor air. The model output results are also presented in Table 26. The total cancer risk resulting from inhalation of indoor VOCs at their 95% UCL concentrations was  $3.9\text{E-}7$ . The total hazard quotient resulting from this exposure was 0.015. Both values are below the regulatory level of  $1\text{E-}6$  for cancer and 1.0 for non-cancer adverse health effects. Hence, the results support the conclusion that the risk of experiencing additional cancer cases or non-carcinogenic adverse health effects due to exposure to VOCs inhaled from indoor air are negligible.

In addition to the risks from soil gas to indoor air, the effect of soil gas to outdoor air was also calculated. The cancer risks and health hazards due to inhalation of VOCs in outdoor air were calculated using equations from the PEA Guidance Manual as described in Sections 8.6.1 and 8.6.2 and calculated VOC concentrations in soil. The VOC concentrations in soil were derived using soil gas VOC concentrations as described in Section 7.4.

For all analytes modeled, the risk due to inhalation of outdoor air was approximately an order of magnitude smaller than the risk due to inhalation of indoor air. The hazard due to inhalation of outdoor air is also approximately an order of magnitude smaller than the hazards due to inhalation of indoor air. These results are summarized in Table 23 and Table 24.

Table 23 shows that the estimated cancer risk due to inhalation of VOCs in outdoor air was  $2.2\text{E-}9$ . This value is below the de minimus level of concern of  $1\text{E-}6$ . Table 24 shows the estimated health hazard indices due to inhalation of VOCs in outdoor air was  $1.2\text{E-}3$ . This value is also below the de minimus level of concern of 1.0. Therefore, the health hazards and cancer risks associated with inhalation of VOCs in outdoor appeared to be negligible.

#### **7.6.5 CUMULATIVE RISK AND HAZARD**

Cumulative potential risks from soil and soil-gas exposure were calculated by summing all pathways (Table 25). The total cancer risk is  $8\text{E-}4$  at the proposed school site, which exceeds the de minimis acceptable criteria of  $1\text{E-}6$ . As explained in Section 7.6.3, this value resulted primarily from the concentration of SVOCs in one shallow soil sample. Without this result, the total site cancer risk would be approximately  $1.5\text{E-}6$ , which is equivalent to the lowest benchmark limit of  $1\text{E-}6$ . Note that the modeled risk is based on the maximum detected concentrations in soil and soil-gas samples rather than an estimate of the average concentrations and therefore provides a conservative estimate of health risk.



The cumulative site hazard index (HI) is 0.068, which is below the target HI of 1.0. Therefore, the likelihood that one would experience non-carcinogenic adverse health effects due to exposure to on-site chemicals is negligible.

## **7.7 UNCERTAINTY ANALYSIS**

As stated in the PEA Guidance Manual, the purpose of the human health screening evaluation is not to predict individual health risks but to provide risk managers with an estimate of potential chronic health hazards from chemicals at the site. As a result, the estimated risk values involve uncertainties that reflect the modeled COPC concentrations and the assumptions made for model input variables such as exposure duration, intake rates, calculated exposure concentrations in indoor and outdoor air, soil type and associated site-specific physical parameters. If information was incomplete, conservative values were selected for input into the calculations to estimate cancer risks and non-carcinogenic health hazards. For these reasons, results of a PEA typically overestimate risk/hazards. Actual risks and hazards are likely to be much lower, depending on the actual receptor exposures and land uses. Hence, estimated health risks in this document are expected to be protective of human health.

## **7.8 UNCERTAINTIES ASSOCIATED WITH COPCS**

It was assumed that all detected pesticides, SVOCs and VOCs were COPCs because they were likely derived from human activities. Hence, their natural background concentrations are assumed to be nil. However, SVOCs and VOCs may be present in site media as a result of non-site related urban activities. The maximum detected concentration of each analyte in soil and soil gas was assumed to be representative of concentrations throughout the site. A more accurate representative concentration would be the average concentration, or the 95% upper confidence limit (UCL) on the mean. Use of the highest concentration is thus a conservative assumption that results in an overestimation of associated health risks.

The equation in Section 7.5 that was used to convert soil gas VOC concentrations to soil VOC concentrations derives a ratio of the volume within soil that soil gas can occupy and multiplies this ratio by the soil gas VOC concentration to derive the soil VOC concentration. This equation assumes that within the soil matrix, VOCs bound to soil particles, VOCs in the vapor phase and VOCs dissolved in soil water are in equilibrium. A number of field research reports were conducted to evaluate the validity of the model, and results have been mixed. Hence, it is unclear whether this calculation leads to a more or

less conservative estimate of soil VOC concentrations. Risk estimates due to inhalation of outdoor air containing VOCs is thought to be conservative because of the assumed extended exposure duration as discussed in Section 7.7.3 below.

#### **7.8.1 UNCERTAINTIES INVOLVING TOXICITY FACTORS**

As discussed in Sections 8.6.1 and 8.6.2, cancer slope factors and non-carcinogenic reference doses are derived from toxicity experiments using laboratory animals. Extrapolation of toxicity factors derived from animal tests for use in deriving health risk estimates for humans involve several assumptions that make the resulting risk estimates conservative. These assumptions generally involve dividing the toxicity value derived from animal studies by factors of 10 to account for each of the following differences in: (a) toxic response between test animals and humans, (b) susceptibility between individuals within the human population, (c) using non-chronic data to estimate chronic toxicity responses, and (d) use of the Lowest Observable Adverse Effect Level (LOAEL) instead of a No Observable Adverse Effect Level (NOAEL) to estimate the threshold for a reference dose. In addition, modification factors are also divided into toxicity values to account for differences in metabolism and/or the mechanism of toxicity of a xenobiotic between test animals and humans. Therefore, the cancer slope factors and non-carcinogenic reference doses used to derive human health risk estimates are themselves derived using conservative assumptions.

#### **7.8.2 UNCERTAINTIES INVOLVING ESTIMATED EXPOSURE CONCENTRATIONS**

In addition to using the highest detected concentrations as representative exposure concentrations, additional exposure assumptions make the risk estimates derived in this document conservative. For example, use of the residential exposure scenario assumes that a child is raised on-site for the first six years of his life, and then lives on-site as an "adult" for the next 24 years of his life. This is a conservative assumption because it assumes an exposure period of 24 hours per day, 365 days per year for a total of 30 years. A more realistic exposure for the proposed school site would be 6-8 hours per day for "adult" students (i.e., seven years of age and older) for a total of three years, and eight hours per day for 191 days per year for 30 years for teachers and administrators.

To estimate risks due to soil ingestion exposures, algorithms in the PEA Guidance Manual assume that a child will ingest 0.2 grams soil per day. Analogous assumptions are made to estimate dermal exposures. These assumptions are conservative because the site will be landscaped, and little, if any, exposure to soil should occur. In addition, most of the time that a receptor spends on-site will be indoors. Hence, it is

anticipated that the assumptions used to estimate chemical exposures in this risk assessment are conservative.

The Johnson & Ettinger soil screening program was used to estimate VOC concentrations in indoor air. This model assumes that VOCs diffuse upwards from subsurface soils and enter buildings through cracks in the foundation due to a slight negative pressure indoors that is created by outside air movement. The model assumes default values for a hypothetical building perimeter, area of the foundation below grade, and the foundation crack area. It uses soil properties and chemical properties of each contaminant to estimate the vapor influx rate into the hypothetical building. It is unclear whether such assumptions result in conservatively high or low health risk estimates. The best way to evaluate the conservative nature of the model is to compare modeling results with actual field measurements. This model also assumes a 350 day per year for 30 year exposure duration. As discussed above, this is a conservative assumption that leads to higher risk estimates.

### **7.8.3 UNCERTAINTIES ASSOCIATED WITH THE CUMULATIVE SITE RISK ESTIMATE**

The cumulative site cancer risk of  $8.0\text{E-}4$  was due solely to hypothetical exposures to SVOCs (Table 25). As discussed in Section 7.6.3, estimated SVOC exposure point concentrations were based on test results from a single soil sample, SB-21-0.5. Hence, the SVOC concentrations used for deriving risk estimates were not representative of overall site conditions. Step-out borings installed around SB-21-0.5 revealed much lower SVOC concentrations. Therefore, site health risks estimated based on SVOC exposures are overly conservative.

Without the risk contributed by the SVOCs, the overall site risk is approximately  $1.5\text{E-}6$ . This value was derived based on estimated exposures to VOCs in indoor air. As discussed above, the exposure duration and toxicity value assumptions used to derive this risk estimate are conservative. This risk value overestimates the actual site health risk. Because the risk value of  $1.5\text{E-}6$  is approximately equal to the regulatory benchmark of  $1\text{E-}6$  for school sites, and is a conservative estimate, it appears that the incremental cancer risk due to inhalation of VOCs at the site is insignificant.

## **8.0 ECOLOGICAL SCREENING EVALUATION**

### **8.1 SITE CHARACTERIZATION**

The Proposed East Valley School Middle School #1 site is located within a completely developed and urbanized area in the City of Los Angeles. The site consists entirely of commercial buildings (two) buildings associated with a strip mall and (two) building associated with an auto service center. The remainder of the property is asphalt-paved parking lots (three), an asphalt-paved street (Bellingham Avenue), and perimeter sidewalks. Immediately northwest of the property is a residential area, to the north, south, and east are commercial buildings and to the west are the Valley Plaza Community Center and Park.

### **BIOLOGICAL CHARACTERIZATION**

Native wildlife does not exist within the limits of the project area. Valley Plaza Community Center and Park located adjacent to the property to the west, provides active and passive recreational uses. Urban-adapted wildlife species utilize the park. During bird migratory periods or dispersal movements, individuals of sensitive bird species may park as transitory birds. The park was constructed in approximately 1965; at that time most of the native organism were replaced by those typical of highly developed urban areas. Consequently there are few resources for migratory birds within the project area.

Small populations of urban adapted amphibian and reptile species and small animals may be present in the park and nearby residential areas, especially where gardens and landscape groundcover, such as ivy, are maintained. None of the animals, reptile or amphibian species, which may be present in the park are known to be threatened or endangered. As for the subject site, due to the highly developed state, the likelihood of such species to occur is very low.

### **8.2 ECOLOGICAL PATHWAY ASSESSMENT**

The subject property is completely developed and paved. The property does not support any vegetation or provide native wildlife or habitat. Therefore, there does not appear to a significant soil pathway of exposure to ecologically sensitive species, and subsequently, no quantitative ecological assessment was conducted.

### **8.3 ECOLOGICAL SCREENING EVALUATION SUMMARY**

The site is located within a highly developed area. Although the Valley Plaza Community Center and Park is located adjacent to the property on the west, no natural habitats are known to exist within the park, therefore there does not appear to a significant pathway of exposure to ecologically sensitive species.



## **9.0 COMMUNITY PROFILE**

### **9.1 PEA NOTIFICATION LETTER**

In accordance with AB 2664 and the PEA Work Plan, a PEA Notification Letter was drafted under the direction and guidance of LAUSD. The purpose of the PEA Notification letter was to inform the surrounding community of the PEA investigation. The letter was reviewed and approved by the LAUSD, prior to distribution. In addition, a Key Contacts List was developed including federal, state, and local elected officials and LAUSD and DTSC representatives.

## **10.0 DATA VALIDATION AND EVALUATION**

The investigation was conducted in accordance with the requirements of the Guidance and the specifications of the PEA Work Plan (Earth Tech 2001). The following describes the findings of the data validation process.

### **10.1 FIELD SAMPLING QUALITY CONTROL**

Quality control samples collected in the field for soil gas samples were duplicates, analyzed at both the field laboratory and a fixed-base laboratory. The results of the duplicate measurements were compared and found generally within the range of variability for soil and soil gas analysis.

### **10.2 LABORATORY ANALYSIS QUALITY CONTROL**

Samples collected were submitted to a State of California Environmental Laboratory Accreditation Program (ELAP) certified laboratory for analyses presented in the PEA Work Plan. Laboratory reports were subjected to validation for compliance with the method and laboratory procedures. Approximately 10 percent of the samples were subjected to Level D review by an independent, third party validation subcontractor. Review included evaluation of:

- Data completeness
- Compliance with method specified holding times
- Laboratory blank results
- Method specified quality control analysis (matrix spikes, laboratory duplicates, laboratory control standards, surrogates (as required))
- Compound identification and quantitation (initial calibration, continuing calibration)

All of the laboratory measurements were usable for the purpose intended although some data was qualified as estimated. The findings of the validation process were incorporated into the recommendations and conclusions of the PEA. The following issues were noted during the process.

- Arsenic and zinc were detected in select method blanks. Results of associated samples would be qualified as non-detect or estimated. However, none of the data qualification would result in a change to the findings and recommendations of this report.

- Molybdenum was detected in a method blank. Results of associated samples would be qualified as non-detect or estimated. However, none of the data qualification would result in a change to the findings and recommendations of this report.

Other anomalies were also identified but were determined not to have an effect on the conclusions or recommendation of the investigation.

## 11.0 HSP IMPLEMENTATION

Earth Tech prepared a site-specific Health and Safety Plan (HSP) pursuant to Health and Safety Code 1910.120. The HSP is provided in the PEA Work Plan as Appendix C. Specifically, the HSP addresses the following:

- Identification and description of potentially hazardous substances that may be encountered during field investigation activities
- Description of PPE and clothing for the site activities
- Identification of measures that may be implemented in the event of an emergency

Earth Tech field personnel reviewed the HSP prior to commencing field work. Prior to the initiation of field activities each day, a site safety briefing was conducted to identify potential physical and chemical hazards and outline measures to be taken in the event of an emergency. All onsite were required to sign the safety briefing form.

During field activities, all personnel within the exclusion zone wore appropriate Level D PPE. The worker's breathing zone was continually monitored for organic vapors using a PID as required by the HSP. All breathing zone PID measurements were non-detectable and below action levels. Thus, all fieldwork was performed under Level D conditions.

Potential hazards to public health and safety were minimal because nearly all of the site investigation was conducted on private property that is currently developed with operating businesses. No incidents or emergency actions occurred during the field program.

## 12.0 VARIANCES

This section addresses field variances to the approved PEA Work Plan (Earth Tech, 2001) that resulted from field conditions and additional site information that was obtained during the execution of the field investigation activities. Typically, field variances included moving the location of soil matrix borings, adding soil borings or modifying the proposed sample depths. An on-site representative from the DTSC was consulted regarding the change in the sampling program. Field variances are described below.

### Soil Gas

Refusal was encountered at soil gas sample location SG-11 at a depth of 9 feet bgs. This sample location is shared by soil matrix sampling location SB-6. Several attempts were made to achieve the desired sampling depth, but all failed due to a planar concrete feature, which could not be breached. For this reason, soil gas samples at this location were taken at 9 feet bgs only, instead of 10 and 20 feet bgs.

Refusal was encountered at soil gas sample location SG-18 at a depth of 18 feet bgs. This borehole was drilled with a portable Geoprobe™ direct-push sampler due to its limited access location within the western service bay. At 18 bgs, refusal was encountered due to dense sands and low torque of the sampling rig. For this reason, soil gas samples at this location were collected at 10 and 18 feet bgs, instead of 10 and 20 feet bgs.

No other revisions were made to the proposed soil gas sampling plan.

### Soil Samples

Refusal was encountered at 9 feet bgs at soil matrix sampling location SB-6. Because of the refusal described above, soil samples were collected at 5 and 9 feet bgs, instead of at 5, 10, and 15 feet bgs.

Soil matrix sampling locations SB-19 and SB-20 were moved within the western service bay from their original locations. After further assessment, former or existing underground hoists were not identified at the proposed locations, however, former or existing underground hoists, were located in nearby service bays. The sampling depths and analysis followed the same rational as with other underground hydraulic hoist boring locations.



Soil matrix sampling location SB-31 was added to an area of the western service bay where a former underground hoist existed. The approved PEA Work Plan did not have a soil matrix sampling location proposed for this location. The sampling depths and analysis followed the same rational as with other underground hydraulic hoist boring locations.

Soil matrix sampling locations SB-32 and SB-33 were added to the sampling matrix. Their location was proposed in the PEA Work Plan, however, the proposed boring number was duplicated with two other location (SB-9 and SB-13). The sampling depths and analyses followed the same rational as with similar PECs.

Soil matrix sampling location SB-21A was added three feet northwest of soil matrix sampling location SB-21 because of refusal, due to subsurface concrete at 3.5 feet bgs, at boring SB-21. The sampling depths and analyses followed the sampling program for boring SB-21.

Soil matrix sampling location SB-34 was added to the sampling matrix to assess the presence of contaminants possibly associated with an elevator piston. The total depth of the elevator piston was estimated to be approximately 25 feet bgs. Three soil samples were collected, 20, 30, and 35 feet bgs. The 20 foot and 30 foot samples were analyzed for SVOCs via EPA Method 8270C, metals by EPA Method 6000/7000 and the 30 foot sample was also analyzed for PCBs according to EPA Method 8082. The 35 foot sample was archived pending results of shallower samples.

No other revisions were made to the proposed soil matrix sampling plan.

## **13.0 CONCLUSIONS AND RECOMMENDATIONS**

### **13.1 SUMMARY AND CONCLUSIONS**

#### **13.1.1 SITE DESCRIPTION**

The proposed East Valley Middle School No. 1 is an L-shaped area of land bounded by Kittridge Street on the north, Hamlin Street on the south, Laurel Canyon Boulevard on the east, and Saint Clair Avenue to the west, within the North Hollywood area of the incorporated city of Los Angeles, California. The site consists of approximately 10 acres of commercially developed land (see Figure 2) with four buildings, paved parking lots and a public access road (Bellingham Avenue).

#### **13.1.2 SURROUNDING LAND USE**

Single family residences occupy the area northwest of the property. Commercial properties occupy the area north, northeast, east and south of the property. The Valley Plaza Community Center and Park is located west of the site.

#### **13.1.3 LABORATORY ANALYTICAL RESULTS**

Results of the soil gas-sampling program, revealed the detection of 13 VOCs at low to trace levels. The highest concentration of VOC detected was PCE at 5.7896 µg/L at location SG-11 (former UST area).

Analytical results of the soil-matrix sampling program revealed the following:

- All of the 17 Title 22 metals were detected across the site with the exception of Thallium. The highest concentrations detected in 12 metals exceeded the highest concentration of their respective backgrounds. None of the site average concentrations of these metals exceeded their respective maximum background concentrations. Based on the latter observation, none of the detected metals were determined to be COPCs.
- Of the 79 soil samples analyzed for SVOCs, one soil sample (SB-21-0.5), near a former underground hoist) had detectable concentrations of 12 SVOCs. This sample was retested to confirm the concentrations detected (SB-21-0.5R) and a composite of the sample was also analyzed (SB-21-0.5H). All SVOCs detected are considered to be COPCs.
- Of the 10 soil samples analyzed for pesticides, four samples showed detectable concentrations of one to three separate pesticides. All pesticides detected are considered to be COPCs.

- TPH was detected at low to trace concentrations in one boring (SB-6) at five and nine feet bgs. The concentrations of TPH detected are not considered to be a concern.
- PCBs were not detected at the site.
- The concentration of pH ranged from 4.12 to 5.84.

#### **13.1.4 HUMAN HEALTH SCREENING EVALUATION**

A total of 30 chemicals were identified as COPCs in soil and soil gas at the site. These COPCs were evaluated in the human health screening evaluation.

Using maximum COPC concentrations detected at the site, a total incremental cancer risk for hypothetical residential exposure to soil through direct contact (including incidental ingestion, dermal contact and inhalation of dust particles) was estimated to be  $8E-04$ . The chemicals that contributed to more than 99.9 percent of the estimated incremental cancer risk were the carcinogenic SVOCs detected in soil sample SB-21-0.5. The lateral extent of SVOC impacted soil seems to be very limited as only one of 77 samples collected at the site contained detectable concentrations of SVOCs.

The total hazard index for hypothetical residential exposure to soil through direct contact (including incidental ingestion, dermal contact and inhalation of dust particles) was estimated to be  $2.7E-02$ . The estimated hazard index for the site is below 1.0, the benchmark level for non-cancer effects.

The total cancer risk and hazard index associated with exposure to VOC-impacted indoor air were calculated to be  $1.5E-6$  and 0.04, respectively. The cancer risk slightly above the risk criterion of  $1E-6$ . The total hazard index for this pathway is below the level of regulatory concern (i.e., 1.0).

The use of the maximum detected soil gas concentrations provides a conservative estimate of associated cancer risks and health hazards. Furthermore, assuming that a resident resides at the site 24 hours per day for 30 years also provides a conservative estimate of the chemical exposure.

In order to utilize all soil gas data collected, soil gas data obtained using EPA Method TO-14A and EPA Method 8260 were combined and the 95% upper confidence limit (95% UCL) from the mean was derived for each averaged VOC concentration. The total cancer risk resulting from inhalation of indoor VOCs at their 95% UCL concentrations was  $3.9E-7$ . The total hazard quotient resulting from this exposure was 0.015. Both values are below the cancer risk criterion of  $1E-6$  and 1.0 for non-cancer adverse health effects.

For all analytes modeled, the risk due to inhalation of outdoor air was approximately three orders of magnitude smaller than the risk due to inhalation of indoor air. The hazard index due to inhalation of outdoor air was more than an order of magnitude smaller than the hazard index due to inhalation of indoor air. The estimated cancer risk due to inhalation of VOCs in outdoor air was  $2.2\text{E-}9$ . This value is below the cancer risk criterion of  $1\text{E-}6$ . The estimated total health hazard index due to inhalation of VOCs in outdoor air was  $1.2\text{E-}3$ . This value is also below the level of concern of 1.0.

Cumulative potential risks from soil and soil-gas exposure were calculated by summing all pathways. The total cancer risk is  $8\text{E-}4$  at the proposed school site, which exceeds the acceptable criteria of  $1\text{E-}6$ . If the SVOC data from SB-21-0.5, the total site cancer risk would be approximately  $1.5\text{E-}6$ , which is slightly above cancer risk criterion of  $1\text{E-}6$ . Note that the modeled risk is based on the maximum detected concentrations in soil and soil-gas samples rather than an estimate of the average concentrations and therefore provides a conservative estimate of health risk. The cumulative site hazard index is 0.068, which is below the target hazard index of 1.0.

### **13.2 RECOMMENDATIONS**

Based on the concentrations of SVOCs detected in soil sample SB-21-0.5, additional assessment to determine the distribution and occurrence of elevated SVOCs should be conducted in the form of a supplemental site investigation (SSI). Results of the SSI will be summarized in a SSI Report with recommendations for either remedial action or no further action. Based on the results of this PEA, no further action for the remainder of the site should be required.

## 14.0 REFERENCES

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## FIGURES

COMMERCIAL/RETAIL  
PARCELS

COMMERCIAL/RETAIL  
PARCELS

COMMERCIAL/RETAIL  
PARCELS

LAUREL CANYON BOULEVARD

RETAIL CENTER/  
SMART AND FINAL

RETAIL CENTER/  
SEARS AND SMALL RETAIL SHOPS

KITTRIDGE STREET

HAMILIN STREET

SINGLE FAMILY RESIDENCES

RETAIL CENTER/  
SEARS AND SMALL RETAIL SHOPS

ASPHALT PAVED  
PARKING LOT

EAST VALLEY/  
SHOPPING CENTER/  
RETAIL MALL

EAST VALLEY/  
SHOPPING CENTER/  
RETAIL MALL

ASPHALT PAVED  
PARKING LOT

SEARS AUTO CENTER

FORMER SEARS AUTO  
CENTER BUILDING

SINGLE FAMILY  
RESIDENCES

SEARS AUTO  
GARAGE

BELLINGHAM AVENUE

FORMER SEARS  
GARDEN CENTER  
(REMOVED)

SINGLE FAMILY  
RESIDENCES

ASPHALT PAVED  
PARKING LOT

SAINT CLAIR AVENUE

COMMUNITY PARK LAND

### EXPLANATION

— — — PROPOSED SCHOOL BOUNDARY

### NOTES:

1. SOURCE: CALIFORNIA ENVIRONMENTAL, DATED JULY 2000.
2. FEATURES AND LOCATIONS ARE APPROXIMATE.



NORTH

0 150 300  
APPROXIMATE SCALE IN FEET

EAST VALLEY MIDDLE SCHOOL  
LOS ANGELES, CA

### SITE PLAN

LOS ANGELES UNIFIED SCHOOL DISTRICT  
LOS ANGELES, CA

DATE: 02-02

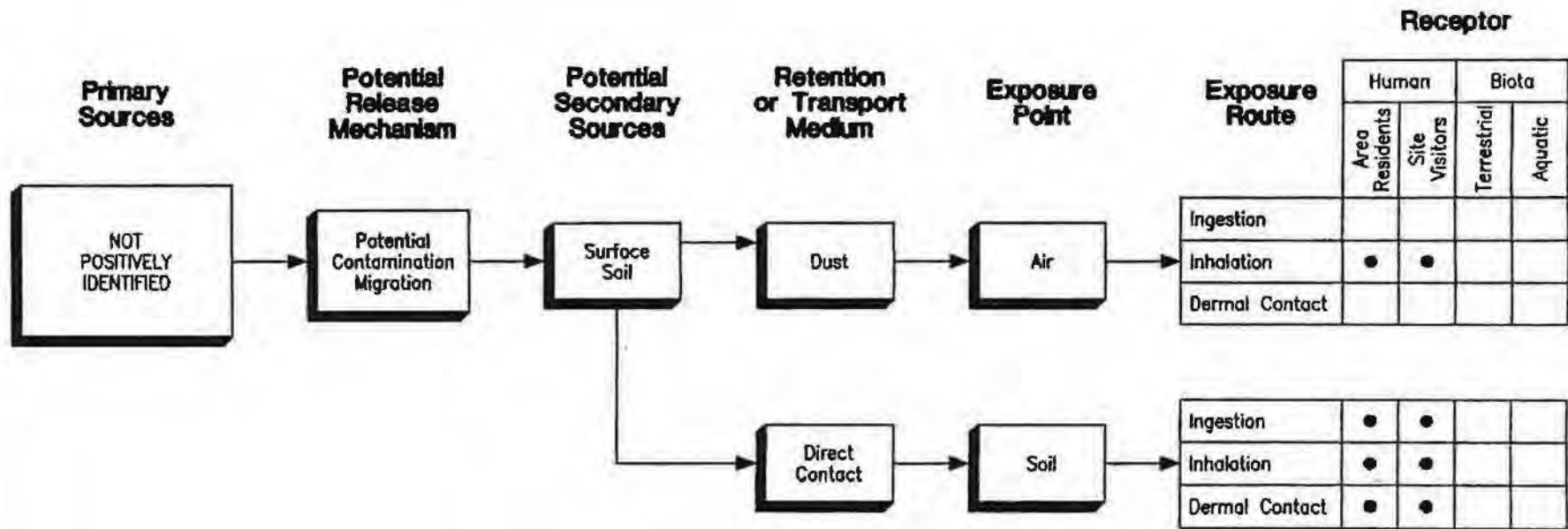
PROJECT NO.

53306

EARTH  TECH

FIGURE

2



• REPRESENTS A POSSIBLE EXPOSURE SCENARIO EVALUATED IN PEA

### Conceptual Site Model Potential Pathways

Date 3-02	LAUSD	Figure 5
Project No. 53306.06	EARTH TECH <small>A tyco INTERNATIONAL LTD. COMPANY</small>	



## **TABLES**



Table 1  
Summary of Soil Gas Data (EPA Method 8260)  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Reporting Unit: µg/L of Air

DATE ANALYZED			01/22/02	01/22/02	01/22/02	01/22/02
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			M2-882-3	M2-882-4	M2-882-5	M2-882-6
CLIENT SAMPLE I.D.			SG-1-10	SG-1-10 D	SG-1-20	SG-2-10
COMPOUND	MDL	EQL				
Carbon Tetrachloride	1.0	1.0	ND	ND	ND	ND
Chloroethane	1.0	1.0	ND	ND	ND	ND
Chloroform	1.0	1.0	ND	ND	ND	ND
Dichlorodifluoromethane	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	1.0	1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)	1.0	1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)	1.0	1.0	ND	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	1.0	1.0	ND	ND	ND	ND
Trichloroethylene (TCE)	1.0	1.0	ND	ND	ND	ND
Methylene Chloride	1.0	1.0	ND	ND	ND	ND
Trichlorofluoromethane	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane	1.0	1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene	1.0	1.0	ND	ND	ND	ND
Toluene	2.0	2.0	ND	ND	ND	ND
m,p-Xylenes	2.0	2.0	ND	ND	ND	ND
o-Xylene	1.0	1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	108	108	111	105
Toluene-d8	50	70-130	95	94	94	96
Bromofluorobenzene	50	70-130	94	93	93	95

SPK CONC = Spiking Concentration (<= 5 x PQL); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit

Table 1  
Summary of Soil Gas Data (EPA Method 8260)  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Reporting Unit: µg/L of Air

DATE ANALYZED			01/22/02	01/22/02	01/22/02	01/22/02
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			M2-882-7	M2-882-8	M2-882-9	M2-882-10
CLIENT SAMPLE I.D.			SG-2-20	SG-3-10	SG-3-20	SG-4-10
COMPOUND	MDL	EQL				
Carbon Tetrachloride	1.0	1.0	ND	ND	ND	ND
Chloroethane	1.0	1.0	ND	ND	ND	ND
Chloroform	1.0	1.0	ND	ND	ND	ND
Dichlorodifluoromethane	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	1.0	1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)	1.0	1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)	1.0	1.0	ND	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	1.0	1.0	ND	ND	ND	ND
Trichloroethylene (TCE)	1.0	1.0	ND	ND	ND	ND
Methylene Chloride	1.0	1.0	ND	ND	ND	ND
Trichlorofluoromethane	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane	1.0	1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene	1.0	1.0	ND	ND	ND	ND
Toluene	2.0	2.0	ND	ND	ND	ND
m,p-Xylenes	2.0	2.0	ND	ND	ND	ND
o-Xylene	1.0	1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	107	107	120	112
Toluene-d8	50	70-130	96	96	97	96
Bromofluorobenzene	50	70-130	93	95	95	94

SPK CONC = Spiking Concentration ( $\leq 5 \times \text{POL}$ ); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.

Table 1  
Summary of Soil Gas Data (EPA Method 8260)  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Reporting Unit: µg/L of Air

DATE ANALYZED			01/22/02	01/22/02	01/22/02	01/22/02
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			M2-882-11	M2-882-12	M2-882-13	M2-882-14
CLIENT SAMPLE I.D.			SG-4-20	SG-5-10	SG-5-20	SG-6-10
COMPOUND	MDL	EQL				
Carbon Tetrachloride	1.0	1.0	ND	ND	ND	ND
Chloroethane	1.0	1.0	ND	ND	ND	ND
Chloroform	1.0	1.0	ND	ND	ND	ND
Dichlorodifluoromethane	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	1.0	1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)	1.0	1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)	1.0	1.0	ND	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	1.0	1.0	ND	ND	ND	ND
Trichloroethylene (TCE)	1.0	1.0	ND	ND	ND	ND
Methylene Chloride	1.0	1.0	ND	ND	ND	ND
Trichlorofluoromethane	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane	1.0	1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene	1.0	1.0	ND	ND	ND	ND
Toluene	2.0	2.0	ND	ND	ND	ND
m,p-Xylenes	2.0	2.0	ND	ND	ND	ND
o-Xylene	1.0	1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	115	113	114	119
Toluene-d8	50	70-130	95	97	94	96
Bromofluorobenzene	50	70-130	94	92	94	96

SPK CONC = Spiking Concentration (<= 5 x PQL); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.

Table 1  
Summary of Soil Gas Data (EPA Method 8260)  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Reporting Unit: µg/L of Air

DATE ANALYZED			01/22/02	01/22/02	01/22/02	01/22/02
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			M2-882-15	M2-882-16	Amb. Blank	M2-882-1
CLIENT SAMPLE I.D.			SG-6-20	SG-6-20 D	NA	SG-7-10
COMPOUND	MDL	EQL				
Carbon Tetrachloride	1.0	1.0	ND	ND	ND	ND
Chloroethane	1.0	1.0	ND	ND	ND	ND
Chloroform	1.0	1.0	ND	ND	ND	ND
Dichlorodifluoromethane	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	1.0	1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)	1.0	1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)	1.0	1.0	ND	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	1.0	1.0	ND	ND	ND	ND
Trichloroethylene (TCE)	1.0	1.0	ND	ND	ND	ND
Methylene Chloride	1.0	1.0	ND	ND	ND	ND
Trichlorofluoromethane	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane	1.0	1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene	1.0	1.0	ND	ND	ND	ND
Toluene	2.0	2.0	ND	ND	ND	ND
m,p-Xylenes	2.0	2.0	ND	ND	ND	ND
o-Xylene	1.0	1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	113	112	106	101
Toluene-d8	50	70-130	95	95	96	93
Bromofluorobenzene	50	70-130	96	94	95	93

SPK CONC = Spiking Concentration ( $\leq 5 \times$  PQL); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.



Table 1  
Summary of Soil Gas Data (EPA Method 8260)  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Reporting Unit: µg/L of Air

DATE ANALYZED			01/22/02	01/21/02	01/21/02	01/21/02
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			M2-882-2	M2-881-11	M2-881-12	Amb. Blank
CLIENT SAMPLE I.D.			SG-7-20	SG-8-10	SG-8-20	NA
COMPOUND	MDL	EQL				
Carbon Tetrachloride	1.0	1.0	ND	ND	ND	ND
Chloroethane	1.0	1.0	ND	ND	ND	ND
Chloroform	1.0	1.0	ND	ND	ND	ND
Dichlorodifluoromethane	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	1.0	1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)	1.0	1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)	1.0	1.0	ND	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	1.0	1.0	ND	ND	ND	ND
Trichloroethylene (TCE)	1.0	1.0	ND	ND	ND	ND
Methylene Chloride	1.0	1.0	ND	ND	ND	ND
Trichlorofluoromethane	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane	1.0	1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene	1.0	1.0	ND	ND	ND	ND
Toluene	2.0	2.0	ND	ND	ND	ND
m,p-Xylenes	2.0	2.0	ND	ND	ND	ND
o-Xylene	1.0	1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	105	107	108	110
Toluene-d8	50	70-130	96	96	95	95
Bromofluorobenzene	50	70-130	95	96	94	97

SPK CONC = Spiking Concentration ( $\leq 5 \times$  PQL); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.



Table 1  
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Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Reporting Unit: µg/L of Air

DATE ANALYZED			01/21/02	01/21/02	01/21/02	01/21/02
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			M2-881-1	M2-881-2	M2-881-3	M2-881-4
CLIENT SAMPLE I.D.			SG-9-10 A	SG-9-10 B	SG-9-10 C	SG-9-20
COMPOUND	MDL	EQL				
Carbon Tetrachloride	1.0	1.0	ND	ND	ND	ND
Chloroethane	1.0	1.0	ND	ND	ND	ND
Chloroform	1.0	1.0	ND	ND	ND	ND
Dichlorodifluoromethane	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	1.0	1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)	1.0	1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)	1.0	1.0	ND	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	1.0	1.0	ND	ND	ND	ND
Trichloroethylene (TCE)	1.0	1.0	ND	ND	ND	ND
Methylene Chloride	1.0	1.0	ND	ND	ND	ND
Trichlorofluoromethane	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane	1.0	1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene	1.0	1.0	ND	ND	ND	ND
Toluene	2.0	2.0	ND	ND	ND	ND
m,p-Xylenes	2.0	2.0	ND	ND	ND	ND
o-Xylene	1.0	1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	104	104	103	103
Toluene-d8	50	70-130	94	98	97	95
Bromofluorobenzene	50	70-130	93	97	95	94

SPK CONC = Spiking Concentration (<= 5 x PQL); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.

Table 1  
Summary of Soil Gas Data (EPA Method 8260)  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Reporting Unit: µg/L of Air

DATE ANALYZED			01/21/02	01/21/02	01/21/02	01/23/02
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			M2-881-9	M2-881-10	M2-881-8	M2-883-5
CLIENT SAMPLE I.D.			SG-10-10	SG-10-20	SG-11-9	SG-12-10
COMPOUND	MDL	EQL				
Carbon Tetrachloride	1.0	1.0	ND	ND	ND	ND
Chloroethane	1.0	1.0	ND	ND	ND	ND
Chloroform	1.0	1.0	ND	ND	ND	ND
Dichlorodifluoromethane	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	1.0	1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)	1.0	1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)	1.0	1.0	ND	1.0	1.5	ND
1,1,1-Trichloroethane (1,1,1-TCA)	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	1.0	1.0	ND	ND	ND	ND
Trichloroethylene (TCE)	1.0	1.0	ND	ND	ND	ND
Methylene Chloride	1.0	1.0	ND	ND	ND	ND
Trichlorofluoromethane	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane	1.0	1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene	1.0	1.0	ND	ND	ND	ND
Toluene	2.0	2.0	ND	ND	ND	ND
m,p-Xylenes	2.0	2.0	ND	ND	ND	ND
o-Xylene	1.0	1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	105	110	109	109
Toluene-d8	50	70-130	96	97	96	96
Bromofluorobenzene	50	70-130	95	96	96	92

SPK CONC = Spiking Concentration ( $\leq 5 \times \text{PQL}$ ); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.

Table 1  
Summary of Soil Gas Data (EPA Method 8260)  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Reporting Unit: µg/L of Air

DATE ANALYZED			01/23/02	01/23/02	01/23/02	01/23/02
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			M2-883-6	Amb. Blank	M2-883-1	M2-883-2
CLIENT SAMPLE I.D.			SG-12-20	NA	SG-13-10	SG-13-20
COMPOUND	MDL	EQL				
Carbon Tetrachloride	1.0	1.0	ND	ND	ND	ND
Chloroethane	1.0	1.0	ND	ND	ND	ND
Chloroform	1.0	1.0	ND	ND	ND	ND
Dichlorodifluoromethane	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	1.0	1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)	1.0	1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)	1.0	1.0	ND	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	1.0	1.0	ND	ND	ND	ND
Trichloroethylene (TCE)	1.0	1.0	ND	ND	ND	ND
Methylene Chloride	1.0	1.0	ND	ND	ND	ND
Trichlorofluoromethane	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane	1.0	1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene	1.0	1.0	ND	ND	ND	ND
Toluene	2.0	2.0	ND	ND	ND	ND
m,p-Xylenes	2.0	2.0	ND	ND	ND	ND
o-Xylene	1.0	1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	115	105	108	108
Toluene-d8	50	70-130	96	97	97	97
Bromofluorobenzene	50	70-130	93	94	92	92

SPK CONC = Spiking Concentration ( $\leq 5 \times$  PQL); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.

Table 1  
Summary of Soil Gas Data (EPA Method 8260)  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Reporting Unit: µg/L of Air

DATE ANALYZED			01/21/02	01/21/02	01/21/02	01/21/02
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			M2-882-14	M2-881-13	M2-881-5	M2-881-6
CLIENT SAMPLE I.D.			SG-14-10	SG-14-20	SG-15-10	SG-15-20
COMPOUND	MDL	EQL				
Carbon Tetrachloride	1.0	1.0	ND	ND	ND	ND
Chloroethane	1.0	1.0	ND	ND	ND	ND
Chloroform	1.0	1.0	ND	ND	ND	ND
Dichlorodifluoromethane	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	1.0	1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)	1.0	1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)	1.0	1.0	ND	ND	1.1	1.3
1,1,1-Trichloroethane (1,1,1-TCA)	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	1.0	1.0	ND	ND	ND	ND
Trichloroethylene (TCE)	1.0	1.0	ND	ND	ND	ND
Methylene Chloride	1.0	1.0	ND	ND	ND	ND
Trichlorofluoromethane	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane	1.0	1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene	1.0	1.0	ND	ND	ND	ND
Toluene	2.0	2.0	ND	ND	ND	ND
m,p-Xylenes	2.0	2.0	ND	ND	ND	ND
o-Xylene	1.0	1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	118	109	105	104
Toluene-d8	50	70-130	94	95	96	94
Bromofluorobenzene	50	70-130	94	93	97	97

SPK CONC = Spiking Concentration ( $\leq 5 \times \text{PQL}$ ); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.



Table 1  
Summary of Soil Gas Data (EPA Method 8260)  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Reporting Unit: µg/L of Air

DATE ANALYZED			01/21/02	01/23/02	01/23/02	01/23/02
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			M2-881-7	M2-883-3	M2-883-4	M2-883-7
CLIENT SAMPLE I.D.			SG-15-20 D	SG-16-10	SG-16-20	SG-17-10
COMPOUND	MDL	EQL				
Carbon Tetrachloride	1.0	1.0	ND	ND	ND	ND
Chloroethane	1.0	1.0	ND	ND	ND	ND
Chloroform	1.0	1.0	ND	ND	ND	ND
Dichlorodifluoromethane	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	1.0	1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)	1.0	1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)	1.0	1.0	1.2	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	1.0	1.0	ND	ND	ND	ND
Trichloroethylene (TCE)	1.0	1.0	ND	ND	ND	ND
Methylene Chloride	1.0	1.0	ND	ND	ND	ND
Trichlorofluoromethane	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane	1.0	1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene	1.0	1.0	ND	ND	ND	ND
Toluene	2.0	2.0	ND	ND	ND	ND
m,p-Xylenes	2.0	2.0	ND	ND	ND	ND
o-Xylene	1.0	1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	107	105	105	113
Toluene-d8	50	70-130	95	96	95	95
Bromofluorobenzene	50	70-130	98	92	93	93

SPK CONC = Spiking Concentration ( $\leq 5 \times \text{PQL}$ ); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.



Table 1  
Summary of Soil Gas Data (EPA Method 8260)  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Reporting Unit: µg/L of Air

DATE ANALYZED			01/23/02	01/23/02	01/23/02	01/23/02
DILUTION FACTOR			1	1 *	1	1
LAB SAMPLE I.D.			M2-883-8	M2-883-9	M2-883-18	M2-883-10
CLIENT SAMPLE I.D.			SG-17-20	SG-18-10	SG-18-10 R	SG-18-18
COMPOUND	MDL	EQL				
Carbon Tetrachloride	1.0	1.0	ND	ND	ND	ND
Chloroethane	1.0	1.0	ND	ND	ND	ND
Chloroform	1.0	1.0	ND	ND	ND	ND
Dichlorodifluoromethane	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	1.0	1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)	1.0	1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)	1.0	1.0	ND	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	1.0	1.0	ND	ND	ND	ND
Trichloroethylene (TCE)	1.0	1.0	ND	ND	ND	ND
Methylene Chloride	1.0	1.0	ND	ND	ND	ND
Trichlorofluoromethane	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane	1.0	1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene	1.0	1.0	ND	ND	ND	ND
Toluene	2.0	2.0	ND	ND	ND	ND
m,p-Xylenes	2.0	2.0	ND	ND	ND	ND
o-Xylene	1.0	1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	114	108	111	102
Toluene-d8	50	70-130	91	90	97	91
Bromofluorobenzene	50	70-130	97	99	91	99

SPK CONC = Spiking Concentration (<= 5 x PQL); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.

\* Tracer, hexane, was detected in sample.

Table 1  
Summary of Soil Gas Data (EPA Method 8260)  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Reporting Unit: µg/L of Air

DATE ANALYZED			01/23/02	01/23/02	01/23/02	01/23/02
DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			M2-883-15	M2-883-16	M2-883-17	M2-883-13
CLIENT SAMPLE I.D.			SG-19-10	SG-19-10 D	SG-19-20	SG-20-10
COMPOUND	MDL	EQL				
Carbon Tetrachloride	1.0	1.0	ND	ND	ND	ND
Chloroethane	1.0	1.0	ND	ND	ND	ND
Chloroform	1.0	1.0	ND	ND	ND	ND
Dichlorodifluoromethane	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	1.0	1.0	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)	1.0	1.0	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)	1.0	1.0	ND	ND	ND	ND
cis-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
trans-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	ND
Tetrachloroethylene (PCE)	1.0	1.0	ND	ND	ND	ND
1,1,1-Trichloroethane (1,1,1-TCA)	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	1.0	1.0	ND	ND	ND	ND
Trichloroethylene (TCE)	1.0	1.0	ND	ND	ND	ND
Methylene Chloride	1.0	1.0	ND	ND	ND	ND
Trichlorofluoromethane	1.0	1.0	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane	1.0	1.0	ND	ND	ND	ND
Vinyl Chloride	0.1	0.4	ND	ND	ND	ND
Benzene	0.1	0.4	ND	ND	ND	ND
Ethylbenzene	1.0	1.0	ND	ND	ND	ND
Toluene	2.0	2.0	ND	ND	ND	ND
m,p-Xylenes	2.0	2.0	ND	ND	ND	ND
o-Xylene	1.0	1.0	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	%REC
Dibromofluoromethane	50	70-130	117	116	118	107
Toluene-d8	50	70-130	95	96	95	91
Bromofluorobenzene	50	70-130	95	94	93	99

SPK CONC = Spiking Concentration ( $\leq 5 \times$  PQL); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.

Table 1  
Summary of Soil Gas Data (EPA Method 8260)  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Reporting Unit: µg/L of Air

DATE ANALYZED			01/23/02	01/23/02	01/23/02	
DILUTION FACTOR			1	1	1	
LAB SAMPLE I.D.			M2-883-14	M2-883-11	M2-883-12	
CLIENT SAMPLE I.D.			SG-20-20	SG-21-10	SG-21-20	
COMPOUND	MDL	EQL				
Carbon Tetrachloride	1.0	1.0	ND	ND	ND	
Chloroethane	1.0	1.0	ND	ND	ND	
Chloroform	1.0	1.0	ND	ND	ND	
Dichlorodifluoromethane	1.0	1.0	ND	ND	ND	
1,1-Dichloroethane (1,1-DCA)	1.0	1.0	ND	ND	ND	
1,2-Dichloroethane (1,2-DCA)	1.0	1.0	ND	ND	ND	
1,1-Dichloroethylene (1,1-DCE)	1.0	1.0	ND	ND	ND	
cis-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	
trans-1,2-Dichloroethylene	1.0	1.0	ND	ND	ND	
1,1,1,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	
1,1,2,2-Tetrachloroethane	1.0	1.0	ND	ND	ND	
Tetrachloroethylene (PCE)	1.0	1.0	ND	ND	ND	
1,1,1-Trichloroethane (1,1,1-TCA)	1.0	1.0	ND	ND	ND	
1,1,2-Trichloroethane (1,1,2-TCA)	1.0	1.0	ND	ND	ND	
Trichloroethylene (TCE)	1.0	1.0	ND	ND	ND	
Methylene Chloride	1.0	1.0	ND	ND	ND	
Trichlorofluoromethane	1.0	1.0	ND	ND	ND	
1,1,2-Trichlorotrifluoroethane	1.0	1.0	ND	ND	ND	
Vinyl Chloride	0.1	0.4	ND	ND	ND	
Benzene	0.1	0.4	ND	ND	ND	
Ethylbenzene	1.0	1.0	ND	ND	ND	
Toluene	2.0	2.0	ND	ND	ND	
m,p-Xylenes	2.0	2.0	ND	ND	ND	
o-Xylene	1.0	1.0	ND	ND	ND	
SURROGATE	SPK CONC	ACP%	%REC	%REC	%REC	
Dibromofluoromethane	50	70-130	106	107	106	
Toluene-d8	50	70-130	91	91	91	
Bromofluorobenzene	50	70-130	99	98	99	

SPK CONC = Spiking Concentration (<= 5 x PQL); ACP % = Acceptable Range of Percent; %REC = % Recovery; J = Estimated value.

MDL = Method Detection Limit; MB = Method Blank; ND = Not Detected (Below MDL); NA = Not Analyzed; EQL = Estimated Quantitation Limit.

Table 2  
Summary of Soil Gas Data (EPA Method TO-14A)  
Proposed East Valley Middle School No.1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Method: EPA TO-14A Matrix: Air							
CLIENT: LAUSD							
Project : Proposed East Valley Middle School No. 1							
Results							
Sample Number: SG-4-10							
Compound	Result (ppb v/v)	RL (ppb)	MW (g)	Result (µg/m3)	RL (µg/m3)	Result (µg/l)	RL (µg/l)
Dichlorodifluoromethane	10	0.7	120.91	50.25	3.4616	0.0503	0.0035
Chloromethane	ND	0.7	50.49	ND	1.4455	ND	0.0014
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	2.8	170.93	ND	19.5748	ND	0.0196
Vinyl Chloride	ND	0.7	62.5	ND	1.7894	ND	0.0018
Bromomethane	ND	0.7	94.94	ND	2.7181	ND	0.0027
Chloroethane	ND	0.7	84.52	ND	1.8472	ND	0.0018
Trichlorofluoromethane	ND	0.7	137.38	ND	3.9332	ND	0.0039
1,1-Dichloroethene	ND	0.7	96.95	ND	2.7757	ND	0.0028
Methylene Chloride	ND	2.8	84.94	ND	9.7273	ND	0.0097
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.4	187.38	ND	10.7283	ND	0.0107
1,1-Dichloroethane	ND	0.7	98.96	ND	2.8332	ND	0.0028
c-1,2-Dichloroethene	ND	0.7	96.94	ND	2.7754	ND	0.0028
Chloroform	ND	0.7	119.38	ND	3.4178	ND	0.0034
1,2-Dichloroethane	ND	0.7	98.96	ND	2.8332	ND	0.0028
1,1,1-Trichloroethane	ND	0.7	133.41	ND	3.8195	ND	0.0038
Benzene	ND	0.7	78.12	ND	2.2366	ND	0.0022
Carbon Tetrachloride	ND	0.7	153.82	ND	4.4038	ND	0.0044
1,2-Dichloropropane	ND	0.7	112.99	ND	3.2349	ND	0.0032
c-1,3-Dichloropropene	ND	0.7	110.97	ND	3.1771	ND	0.0032
t-1,3-Dichloropropene	ND	0.7	110.97	ND	3.1771	ND	0.0032
1,1,2-Trichloroethane	ND	0.7	133.41	ND	3.8195	ND	0.0038
Toluene	3.8	0.7	92.15	14.55	2.8382	0.0146	0.0026
Trichloroethene	ND	0.7	131.29	ND	3.7588	ND	0.0038
1,2-Dibromoethane	ND	0.7	187.88	ND	5.3790	ND	0.0054
Tetrachloroethene	4.3	0.7	165.83	29.64	4.7477	0.0296	0.0047
Chlorobenzene	ND	0.7	112.56	ND	3.2226	ND	0.0032
Ethylbenzene	2.7	0.7	106.17	11.91	3.0396	0.0119	0.0030
p/m-Xylene	16	1.4	106.17	70.80	6.0793	0.0706	0.0061
Styrene	ND	1.4	104.16	ND	5.9642	ND	0.0060
1,1,2,2-Tetrachloroethane	ND	0.7	169.87	ND	4.8834	ND	0.0049
o-Xylene	8.7	0.7	106.17	38.39	3.0396	0.0384	0.0030
1,3,5-Trimethylbenzene	3	0.7	120.2	14.99	3.4413	0.0150	0.0034
1,2,4-Trimethylbenzene	5.7	0.7	120.2	28.48	3.4413	0.0285	0.0034
Benzyl Chloride	ND	0.7	126.59	ND	3.6243	ND	0.0036
1,3-Dichlorobenzene	ND	0.7	147.01	ND	4.2089	ND	0.0042
1,4-Dichlorobenzene	ND	0.7	147.01	ND	4.2089	ND	0.0042
1,2-Dichlorobenzene	ND	0.7	147.01	ND	4.2089	ND	0.0042
1,2,4-Trichlorobenzene	ND	0.7	181.45	ND	5.1949	ND	0.0052
Hexachloro-1,3-Butadiene	ND	0.7	260.72	ND	7.4844	ND	0.0075
	(ppm v/v)	(ppm)					
Methane	1	1					
(SCAQMD Method 25.1)							
Notes: MW-molecular weight, RL-Reporting Limit, ND-None Detected							
Results are reported at 1 ATM and 20 degrees C.							



Table 2  
Summary of Soil Gas Data (EPA Method TO-14A)  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Method: EPA TO-14A Matrix: Air							
CLIENT: LAUSD							
Project : Proposed East Valley Middle School No. 1							
Results							
Sample Number: SG-4-20							
Compound	Result (ppb v/v)	RL (ppb)	MW (g)	Result (µg/m <sup>3</sup> )	RL (µg/m <sup>3</sup> )	Result (µg/l)	RL (µg/l)
Dichlorodifluoromethane	15	0.7	120.81	75.38	3.4616	0.0754	0.0035
Chloromethane	ND	0.7	50.49	ND	1.4455	ND	0.0014
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	2.8	170.93	ND	19.5748	ND	0.0196
Vinyl Chloride	ND	0.7	62.5	ND	1.7894	ND	0.0018
Bromomethane	ND	0.7	84.94	ND	2.7181	ND	0.0027
Chloroethane	ND	0.7	64.52	ND	1.8472	ND	0.0018
Trichlorofluoromethane	ND	0.7	137.38	ND	3.9332	ND	0.0039
1,1-Dichloroethene	ND	0.7	96.95	ND	2.7757	ND	0.0028
Methylene Chloride	ND	2.8	84.94	ND	9.7273	ND	0.0097
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.4	187.38	ND	10.7293	ND	0.0107
1,1-Dichloroethane	ND	0.7	98.96	ND	2.8332	ND	0.0028
c-1,2-Dichloroethene	ND	0.7	96.94	ND	2.7754	ND	0.0028
Chloroform	ND	0.7	119.38	ND	3.4178	ND	0.0034
1,2-Dichloroethane	ND	0.7	98.96	ND	2.8332	ND	0.0028
1,1,1-Trichloroethane	1	0.7	133.41	5.54	3.8195	0.0055	0.0038
Benzene	ND	0.7	78.12	ND	2.2366	ND	0.0022
Carbon Tetrachloride	ND	0.7	153.82	ND	4.4038	ND	0.0044
1,2-Dichloropropane	ND	0.7	112.99	ND	3.2349	ND	0.0032
c-1,3-Dichloropropene	ND	0.7	110.97	ND	3.1771	ND	0.0032
t-1,3-Dichloropropene	ND	0.7	110.97	ND	3.1771	ND	0.0032
1,1,2-Trichloroethane	ND	0.7	133.41	ND	3.8195	ND	0.0038
Toluene	4.6	0.7	92.15	17.62	2.6382	0.0176	0.0026
Trichloroethene	ND	0.7	131.29	ND	3.7588	ND	0.0038
1,2-Dibromoethane	ND	0.7	187.88	ND	5.3790	ND	0.0054
Tetrachloroethene	9.3	0.7	186.83	64.10	4.7477	0.0641	0.0047
Chlorobenzene	ND	0.7	112.56	ND	3.2226	ND	0.0032
Ethylbenzene	4.1	0.7	106.17	18.09	3.0396	0.0181	0.0030
p/m-Xylene	21	1.4	106.17	92.87	6.0793	0.0927	0.0061
Styrene	ND	1.4	104.16	ND	5.9642	ND	0.0060
1,1,2,2-Tetrachloroethane	ND	0.7	169.87	ND	4.8634	ND	0.0049
o-Xylene	9.6	0.7	106.17	42.36	3.0396	0.0424	0.0030
1,3,5-Trimethylbenzene	2.3	0.7	120.2	11.49	3.4413	0.0115	0.0034
1,2,4-Trimethylbenzene	4.9	0.7	120.2	24.48	3.4413	0.0245	0.0034
Benzyl Chloride	ND	0.7	126.59	ND	3.6243	ND	0.0036
1,3-Dichlorobenzene	ND	0.7	147.01	ND	4.2089	ND	0.0042
1,4-Dichlorobenzene	ND	0.7	147.01	ND	4.2089	ND	0.0042
1,2-Dichlorobenzene	ND	0.7	147.01	ND	4.2089	ND	0.0042
1,2,4-Trichlorobenzene	ND	0.7	181.45	ND	5.1949	ND	0.0052
Hexachloro-1,3-Butadiene	ND	0.7	260.72	ND	7.4844	ND	0.0075
	(ppm v/v)	(ppm)					
Methane	ND	1					
(SCAQMD Method 25.1)							
Notes: MW-molecular weight, RL-Reporting Limit, ND-None Detected							
Results are reported at 1 ATM and 20 degrees C.							



Table 2  
Summary of Soil Gas Data (EPA Method TO-14A)  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Method: EPA TO-14A Matrix: Air							
CLIENT: LAUSD							
Project : Proposed East Valley Middle School No. 1							
Results							
Sample Number: SG-10-10							
Compound	Result (ppb v/v)	RL (ppb)	MW (g)	Result (µg/m <sup>3</sup> )	RL (µg/m <sup>3</sup> )	Result (µg/l)	RL (µg/l)
Dichlorodifluoromethane	0.92	0.68	120.91	4.62	3.3627	0.0046	0.0034
Chloromethane	ND	0.68	50.48	ND	1.4042	ND	0.0014
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	2.7	170.93	ND	18.8757	ND	0.0189
Vinyl Chloride	ND	0.68	62.5	ND	1.7382	ND	0.0017
Bromomethane	ND	0.68	94.94	ND	2.6405	ND	0.0026
Chloroethane	ND	0.68	64.52	ND	1.7944	ND	0.0018
Trichlorofluoromethane	ND	0.68	137.38	ND	3.8208	ND	0.0038
1,1-Dichloroethene	ND	0.68	96.95	ND	2.8964	ND	0.0027
Methylene Chloride	ND	2.7	84.94	ND	9.3799	ND	0.0094
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.4	187.38	ND	10.7293	ND	0.0107
1,1-Dichloroethane	ND	0.68	98.96	ND	2.7523	ND	0.0028
c-1,2-Dichloroethene	ND	0.68	96.94	ND	2.6961	ND	0.0027
Chloroform	ND	0.68	119.38	ND	3.3202	ND	0.0033
1,2-Dichloroethane	ND	0.68	98.96	ND	2.7523	ND	0.0028
1,1,1-Trichloroethane	ND	0.68	133.41	ND	3.7104	ND	0.0037
Benzene	1.9	0.68	78.12	8.17	2.1727	0.0062	0.0022
Carbon Tetrachloride	ND	0.68	153.82	ND	4.2780	ND	0.0043
1,2-Dichloropropane	ND	0.68	112.99	ND	3.1425	ND	0.0031
c-1,3-Dichloropropene	ND	0.68	110.97	ND	3.0863	ND	0.0031
t-1,3-Dichloropropene	ND	0.68	110.97	ND	3.0863	ND	0.0031
1,1,2-Trichloroethane	ND	0.68	133.41	ND	3.7104	ND	0.0037
Toluene	26	0.68	92.15	99.58	2.5629	0.0996	0.0028
Trichloroethene	ND	0.68	131.29	ND	3.8514	ND	0.0037
1,2-Dibromoethane	ND	0.68	187.88	ND	5.2253	ND	0.0052
Tetrachloroethene	170	2.7	165.83	1171.70	18.3125	1.1717	0.0183
Chlorobenzene	ND	0.68	112.56	ND	3.1305	ND	0.0031
Ethylbenzene	9.7	0.68	106.17	42.80	2.9528	0.0428	0.0030
p/m-Xylene	47	1.4	106.17	207.40	8.0793	0.2074	0.0061
Styrene	ND	1.4	104.16	ND	5.9842	ND	0.0060
1,1,2,2-Tetrachloroethane	ND	0.68	169.87	ND	4.7244	ND	0.0047
o-Xylene	19	0.68	106.17	83.84	2.9528	0.0838	0.0030
1,3,5-Trimethylbenzene	11	0.68	120.2	54.95	3.3430	0.0550	0.0033
1,2,4-Trimethylbenzene	21	0.68	120.2	104.91	3.3430	0.1049	0.0033
Benzyl Chloride	ND	0.68	126.59	ND	3.5207	ND	0.0035
1,3-Dichlorobenzene	ND	0.68	147.01	ND	4.0886	ND	0.0041
1,4-Dichlorobenzene	ND	0.68	147.01	ND	4.0886	ND	0.0041
1,2-Dichlorobenzene	ND	0.68	147.01	ND	4.0886	ND	0.0041
1,2,4-Trichlorobenzene	ND	0.68	181.45	ND	5.0465	ND	0.0050
Hexachloro-1,3-Butadiene	ND	0.68	260.72	ND	7.2511	ND	0.0073
	(ppm v/v)	(ppm)					
Methane	ND	1					
(SCAQMD Method 25.1)							
Notes: MW-molecular weight, RL-Reporting Limit, ND-None Detected							
Results are reported at 1 ATM and 20 degrees C.							

Table 2  
Summary of Soil Gas Data (EPA Method TO-14A)  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Method: EPA TO-14A Matrix: Air							
CLIENT: LAUSD							
Project : Proposed East Valley Middle School No. 1							
Results							
Sample Number: SG-10-20							
Compound	Result (ppb v/v)	RL (ppb)	MW (g)	Result (µg/m3)	RL (µg/m3)	Result (µg/l)	RL (µg/l)
Dichlorodifluoromethane	1.3	0.67	120.91	6.53	3.3133	0.0065	0.0033
Chloromethane	ND	0.67	50.49	ND	1.3836	ND	0.0014
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	2.7	170.93	ND	18.8757	ND	0.0189
Vinyl Chloride	ND	0.67	62.5	ND	1.7127	ND	0.0017
Bromomethane	ND	0.67	94.94	ND	2.6016	ND	0.0026
Chloroethane	ND	0.67	64.52	ND	1.7680	ND	0.0018
Trichlorofluoromethane	0.68	0.67	137.38	3.88	3.7646	0.0039	0.0038
1,1-Dichloroethene	ND	0.67	96.95	ND	2.6567	ND	0.0027
Methylene Chloride	ND	2.7	84.94	ND	9.3799	ND	0.0094
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.3	187.38	ND	9.9829	ND	0.0100
1,1-Dichloroethane	ND	0.67	98.96	ND	2.7118	ND	0.0027
c-1,2-Dichloroethene	ND	0.67	96.94	ND	2.8564	ND	0.0027
Chloroform	ND	0.67	119.38	ND	3.2714	ND	0.0033
1,2-Dichloroethane	ND	0.67	98.96	ND	2.7118	ND	0.0027
1,1,1-Trichloroethane	0.98	0.67	133.41	5.43	3.6558	0.0054	0.0037
Benzene	0.94	0.67	78.12	3.05	2.1407	0.0031	0.0021
Carbon Tetrachloride	ND	0.67	153.82	ND	4.2151	ND	0.0042
1,2-Dichloropropane	ND	0.67	112.99	ND	3.0962	ND	0.0031
c-1,3-Dichloropropane	ND	0.67	110.97	ND	3.0409	ND	0.0030
t-1,3-Dichloropropane	ND	0.67	110.97	ND	3.0409	ND	0.0030
1,1,2-Trichloroethane	ND	0.67	133.41	ND	3.8558	ND	0.0037
Toluene	9.2	0.67	92.15	35.24	2.5252	0.0362	0.0025
Trichloroethene	ND	0.67	131.29	ND	3.5977	ND	0.0036
1,2-Dibromoethane	ND	0.67	187.88	ND	5.1484	ND	0.0051
Tetrachloroethene	740	11	185.83	5100.34	74.8066	5.1003	0.0746
Chlorobenzene	ND	0.67	112.56	ND	3.0845	ND	0.0031
Ethylbenzene	5.4	0.67	106.17	23.83	2.9094	0.0238	0.0029
p/m-Xylene	30	1.3	106.17	132.38	5.6460	0.1324	0.0056
Styrene	ND	1.3	104.16	ND	5.5382	ND	0.0055
1,1,2,2-Tetrachloroethane	ND	0.67	169.87	ND	4.8549	ND	0.0047
o-Xylene	20	0.67	106.17	88.26	2.9094	0.0883	0.0029
1,3,5-Trimethylbenzene	28	0.67	120.2	139.88	3.2938	0.1399	0.0033
1,2,4-Trimethylbenzene	370	11	120.2	1848.46	54.0777	1.8485	0.0541
Benzyl Chloride	ND	0.67	126.59	ND	3.4689	ND	0.0035
1,3-Dichlorobenzene	ND	0.67	147.01	ND	4.0285	ND	0.0040
1,4-Dichlorobenzene	ND	0.67	147.01	ND	4.0285	ND	0.0040
1,2-Dichlorobenzene	ND	0.67	147.01	ND	4.0285	ND	0.0040
1,2,4-Trichlorobenzene	ND	0.67	181.45	ND	4.9722	ND	0.0050
Hexachloro-1,3-Butadiene	ND	0.67	260.72	ND	7.1445	ND	0.0071
Methane	(ppm v/v)	(ppm)					
(SCAQMD Method 25.1)	ND	1	16.04				
Notes: MW-molecular weight, RL-Reporting Limit, ND-None Detected							
Results are reported at 1 ATM and 20 degrees C.							

Table 2  
Summary of Soil Gas Data (EPA Method TO-14A)  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Method: EPA TO-14A Matrix: Air							
CLIENT: LAUSD							
Project : Proposed East Valley Middle School No. 1							
Results							
Sample Number: SG-11-9D							
Compound	Result (ppb v/v)	RL (ppb)	MW (g)	Result (µg/m <sup>3</sup> )	RL (µg/m <sup>3</sup> )	Result (µg/l)	RL (µg/l)
Dichlorodifluoromethane	1.8	0.7	120.91	9.05	3.4616	0.0090	0.0035
Chloromethane	ND	0.7	50.48	ND	1.4455	ND	0.0014
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	2.8	170.93	ND	18.5748	ND	0.0196
Vinyl Chloride	ND	0.7	62.5	ND	1.7894	ND	0.0018
Bromomethane	ND	0.7	94.94	ND	2.7181	ND	0.0027
Chloroethane	ND	0.7	64.52	ND	1.6472	ND	0.0018
Trichlorofluoromethane	0.78	0.7	137.38	4.45	3.9332	0.0045	0.0039
1,1-Dichloroethene	ND	0.7	98.95	ND	2.7757	ND	0.0028
Methylene Chloride	ND	2.8	84.94	ND	9.7273	ND	0.0097
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.4	187.38	ND	10.7293	ND	0.0107
1,1-Dichloroethane	ND	0.7	98.96	ND	2.8332	ND	0.0028
c-1,2-Dichloroethene	ND	0.7	96.94	ND	2.7754	ND	0.0028
Chloroform	ND	0.7	119.38	ND	3.4178	ND	0.0034
1,2-Dichloroethane	ND	0.7	98.96	ND	2.8332	ND	0.0028
1,1,1-Trichloroethane	0.95	0.7	133.41	5.27	3.8195	0.0053	0.0038
Benzene	1.5	0.7	78.12	4.87	2.2366	0.0049	0.0022
Carbon Tetrachloride	ND	0.7	153.82	ND	4.4038	ND	0.0044
1,2-Dichloropropane	ND	0.7	112.99	ND	3.2349	ND	0.0032
c-1,3-Dichloropropene	ND	0.7	110.97	ND	3.1771	ND	0.0032
t-1,3-Dichloropropene	ND	0.7	110.97	ND	3.1771	ND	0.0032
1,1,2-Trichloroethane	ND	0.7	133.41	ND	3.8195	ND	0.0038
Toluene	16	0.7	92.15	61.28	2.6382	0.0613	0.0026
Trichloroethene	3.8	0.7	131.29	20.74	3.7588	0.0207	0.0038
1,2-Dibromoethane	ND	0.7	187.88	ND	5.3790	ND	0.0054
Tetrachloroethene	840	14	165.83	5789.58	94.9538	5.7896	0.0950
Chlorobenzene	ND	0.7	112.56	ND	3.2226	ND	0.0032
Ethylbenzene	4.9	0.7	106.17	21.62	3.0396	0.0216	0.0030
p/m-Xylene	27	1.4	106.17	119.14	6.0793	0.1191	0.0061
Styrene	ND	1.4	104.16	ND	5.9642	ND	0.0060
1,1,2,2-Tetrachloroethane	ND	0.7	169.87	ND	4.8634	ND	0.0049
o-Xylene	12	0.7	106.17	52.95	3.0396	0.0530	0.0030
1,3,5-Trimethylbenzene	7	0.7	120.2	34.97	3.4413	0.0350	0.0034
1,2,4-Trimethylbenzene	15	0.7	120.2	74.94	3.4413	0.0749	0.0034
Benzyl Chloride	ND	0.7	126.59	ND	3.6243	ND	0.0036
1,3-Dichlorobenzene	ND	0.7	147.01	ND	4.2089	ND	0.0042
1,4-Dichlorobenzene	ND	0.7	147.01	ND	4.2089	ND	0.0042
1,2-Dichlorobenzene	ND	0.7	147.01	ND	4.2089	ND	0.0042
1,2,4-Trichlorobenzene	ND	0.7	181.45	ND	5.1949	ND	0.0052
Hexachloro-1,3-Butadiene	ND	0.7	260.72	ND	7.4644	ND	0.0075
Notes: MW-molecular weight, RL-Reporting Limit, ND-None Detected							
Results are reported at 1 ATM and 20 degrees C.							

Table 2  
Summary of Soil Gas Data (EPA Method TO-14A)  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Method: EPA TO-14A Matrix: Air							
CLIENT: LAUSD							
Project : Proposed East Valley Middle School No. 1							
Results							
Sample Number: SG-14-20D							
Compound	Result (ppb v/v)	RL (ppb)	MW (g)	Result (µg/m3)	RL (µg/m3)	Result (µg/l)	RL (µg/l)
Dichlorodifluoromethane	3.4	0.7	120.91	17.09	3.4616	0.0171	0.0035
Chloromethane	ND	0.7	50.49	ND	1.4455	ND	0.0014
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	2.8	170.93	ND	18.5748	ND	0.0198
Vinyl Chloride	ND	0.7	62.5	ND	1.7894	ND	0.0018
Bromomethane	ND	0.7	94.94	ND	2.7181	ND	0.0027
Chloroethane	ND	0.7	64.52	ND	1.8472	ND	0.0018
Trichlorofluoromethane	30	0.7	137.38	171.30	3.9332	0.1713	0.0039
1,1-Dichloroethene	ND	0.7	96.95	ND	2.7757	ND	0.0028
Methylene Chloride	ND	2.8	84.94	ND	9.7273	ND	0.0097
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.4	187.38	ND	10.7293	ND	0.0107
1,1-Dichloroethane	ND	0.7	98.96	ND	2.8332	ND	0.0028
c-1,2-Dichloroethene	ND	0.7	98.94	ND	2.7754	ND	0.0028
Chloroform	ND	0.7	119.38	ND	3.4178	ND	0.0034
1,2-Dichloroethane	ND	0.7	98.96	ND	2.8332	ND	0.0028
1,1,1-Trichloroethane	0.88	0.7	133.41	4.88	3.8195	0.0049	0.0038
Benzene	ND	0.7	78.12	ND	2.2366	ND	0.0022
Carbon Tetrachloride	ND	0.7	153.82	ND	4.4038	ND	0.0044
1,2-Dichloropropane	ND	0.7	112.99	ND	3.2348	ND	0.0032
c-1,3-Dichloropropene	ND	0.7	110.97	ND	3.1771	ND	0.0032
t-1,3-Dichloropropene	ND	0.7	110.97	ND	3.1771	ND	0.0032
1,1,2-Trichloroethane	ND	0.7	133.41	ND	3.8195	ND	0.0038
Toluene	4.5	0.7	92.15	17.24	2.6382	0.0172	0.0026
Trichloroethene	ND	0.7	131.29	ND	3.7588	ND	0.0038
1,2-Dibromoethane	ND	0.7	187.88	ND	5.3790	ND	0.0054
Tetrachloroethene	110	2.8	165.83	758.16	18.9908	0.7582	0.0190
Chlorobenzene	ND	0.7	112.56	ND	3.2226	ND	0.0032
Ethylbenzene	2.7	0.7	106.17	11.91	3.0396	0.0119	0.0030
p/m-Xylene	15	1.4	106.17	66.19	6.0793	0.0662	0.0061
Styrene	ND	1.4	104.16	ND	5.9642	ND	0.0060
1,1,2,2-Tetrachloroethane	ND	0.7	169.87	ND	4.8634	ND	0.0049
o-Xylene	6.3	0.7	106.17	27.80	3.0396	0.0278	0.0030
1,3,5-Trimethylbenzene	1.1	0.7	120.2	5.50	3.4413	0.0055	0.0034
1,2,4-Trimethylbenzene	2.6	0.7	120.2	12.99	3.4413	0.0130	0.0034
Benzyl Chloride	ND	0.7	126.59	ND	3.6243	ND	0.0036
1,3-Dichlorobenzene	ND	0.7	147.01	ND	4.2089	ND	0.0042
1,4-Dichlorobenzene	ND	0.7	147.01	ND	4.2089	ND	0.0042
1,2-Dichlorobenzene	ND	0.7	147.01	ND	4.2089	ND	0.0042
1,2,4-Trichlorobenzene	ND	0.7	181.45	ND	5.1949	ND	0.0052
Hexachloro-1,3-Butadiene	ND	0.7	260.72	ND	7.4644	ND	0.0075
Notes: MW-molecular weight, RL-Reporting Limit, ND-None Detected							
Results are reported at 1 ATM and 20 degrees C.							



Table 2  
Summary of Soil Gas Data (EPA Method TO-14A)  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Method: EPA TO-14A Matrix: Air							
CLIENT: LAUSD							
Project : Proposed East Valley Middle School No. 1							
Results							
Sample Number: SG-15-10D							
Compound	Result (ppb v/v)	RL (ppb)	MW (g)	Result (µg/m3)	RL (µg/m3)	Result (µg/l)	RL (µg/l)
Dichlorodifluoromethane	1.5	0.7	120.91	7.54	3.4816	0.0075	0.0035
Chloromethane	ND	0.7	50.49	ND	1.4455	ND	0.0014
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	2.8	170.93	ND	19.5748	ND	0.0196
Vinyl Chloride	ND	0.7	62.5	ND	1.7894	ND	0.0018
Bromomethane	ND	0.7	94.94	ND	2.7181	ND	0.0027
Chloroethane	ND	0.7	64.52	ND	1.8472	ND	0.0018
Trichlorofluoromethane	0.72	0.7	137.38	4.11	3.9332	0.0041	0.0039
1,1-Dichloroethene	ND	0.7	96.95	ND	2.7757	ND	0.0028
Methylene Chloride	ND	2.8	84.94	ND	8.7273	ND	0.0097
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.4	187.38	ND	10.7293	ND	0.0107
1,1-Dichloroethane	ND	0.7	98.96	ND	2.8332	ND	0.0028
c-1,2-Dichloroethane	ND	0.7	98.94	ND	2.7754	ND	0.0028
Chloroform	ND	0.7	119.38	ND	3.4178	ND	0.0034
1,2-Dichloroethane	ND	0.7	98.96	ND	2.8332	ND	0.0028
1,1,1-Trichloroethane	1.4	0.7	133.41	7.76	3.8195	0.0078	0.0038
Benzene	0.71	0.7	78.12	2.31	2.2366	0.0023	0.0022
Carbon Tetrachloride	ND	0.7	153.82	ND	4.4038	ND	0.0044
1,2-Dichloropropane	ND	0.7	112.99	ND	3.2349	ND	0.0032
c-1,3-Dichloropropene	ND	0.7	110.97	ND	3.1771	ND	0.0032
t-1,3-Dichloropropene	ND	0.7	110.97	ND	3.1771	ND	0.0032
1,1,2-Trichloroethane	ND	0.7	133.41	ND	3.8195	ND	0.0038
Toluene	6.6	0.7	92.15	25.28	2.8382	0.0253	0.0025
Trichloroethene	1.4	0.7	131.29	7.64	3.7588	0.0076	0.0038
1,2-Dibromoethane	ND	0.7	187.88	ND	5.3790	ND	0.0054
Tetrachloroethene	360	6.9	185.83	2481.25	46.7987	2.4812	0.0468
Chlorobenzene	ND	0.7	112.58	ND	3.2226	ND	0.0032
Ethylbenzene	67	0.7	106.17	295.65	3.0396	0.2957	0.0030
p/m-Xylene	260	14	106.17	1147.31	60.7928	1.1473	0.0808
Styrene	0.96	1.4	104.18	4.18	5.8642	0.0042	0.0060
1,1,2,2-Tetrachloroethane	ND	0.7	189.87	ND	4.8634	ND	0.0049
o-Xylene	110	6.9	106.17	485.40	29.9821	0.4854	0.0300
1,3,5-Trimethylbenzene	2	0.7	120.2	9.99	3.4413	0.0100	0.0034
1,2,4-Trimethylbenzene	5.2	0.7	120.2	25.98	3.4413	0.0260	0.0034
Benzyl Chloride	ND	0.7	126.59	ND	3.6243	ND	0.0036
1,3-Dichlorobenzene	ND	0.7	147.01	ND	4.2089	ND	0.0042
1,4-Dichlorobenzene	ND	0.7	147.01	ND	4.2089	ND	0.0042
1,2-Dichlorobenzene	ND	0.7	147.01	ND	4.2089	ND	0.0042
1,2,4-Trichlorobenzene	ND	0.7	181.45	ND	5.1849	ND	0.0052
Hexachloro-1,3-Butadiene	ND	0.7	260.72	ND	7.4644	ND	0.0075
Notes: MW-molecular weight, RL-Reporting Limit, ND-None Detected							
Results are reported at 1 ATM and 20 degrees C.							



Table 2  
Summary of Soil Gas Data (EPA Method TO-14A)  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Method: EPA TO-14A Matrix: Air							
CLIENT: LAUSD							
Project : Proposed East Valley Middle School No. 1							
Results							
Sample Number: SG-15-20D							
Compound	Result (ppb v/v)	RL (ppb)	MW (g)	Result (µg/m3)	RL (µg/m3)	Result (µg/l)	RL (µg/l)
Dichlorodifluoromethane	ND	2.8	120.91	ND	13.8465	ND	0.0138
Chloromethane	ND	2.8	50.49	ND	5.7821	ND	0.0058
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	11	170.83	ND	76.9010	ND	0.0769
Vinyl Chloride	ND	2.8	62.5	ND	7.1575	ND	0.0072
Bromomethane	ND	2.8	94.94	ND	10.8725	ND	0.0109
Chloroethane	ND	2.8	84.52	ND	7.3888	ND	0.0074
Trichlorofluoromethane	ND	2.8	137.38	ND	15.7327	ND	0.0157
1,1-Dichloroethane	ND	2.8	96.95	ND	11.1027	ND	0.0111
Methylene Chloride	ND	11	84.94	ND	38.2143	ND	0.0382
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5.6	187.38	ND	42.9173	ND	0.0429
1,1-Dichloroethane	ND	2.8	98.96	ND	11.3328	ND	0.0113
c-1,2-Dichloroethane	ND	2.8	98.94	ND	11.1015	ND	0.0111
Chloroform	ND	2.8	119.38	ND	13.6713	ND	0.0137
1,2-Dichloroethane	ND	2.8	98.96	ND	11.3328	ND	0.0113
1,1,1-Trichloroethane	ND	2.8	133.41	ND	15.2780	ND	0.0153
Benzene	ND	2.8	78.12	ND	8.9463	ND	0.0089
Carbon Tetrachloride	ND	2.8	153.82	ND	17.8154	ND	0.0176
1,2-Dichloropropane	ND	2.8	112.99	ND	12.9396	ND	0.0129
c-1,3-Dichloropropene	ND	2.8	110.97	ND	12.7082	ND	0.0127
t-1,3-Dichloropropene	ND	2.8	110.97	ND	12.7082	ND	0.0127
1,1,2-Trichloroethane	ND	2.8	133.41	ND	15.2780	ND	0.0153
Toluene	12	2.8	92.15	45.96	10.5530	0.0460	0.0106
Trichloroethene	ND	2.8	131.29	ND	15.0353	ND	0.0150
1,2-Dibromoethane	ND	2.8	187.88	ND	21.5159	ND	0.0215
Tetrachloroethene	460	14	165.83	3170.48	94.9538	3.1705	0.0950
Chlorobenzene	ND	2.8	112.56	ND	12.8903	ND	0.0129
Ethylbenzene	44	2.8	106.17	194.18	12.1585	0.1942	0.0122
p/m-Xylene	160	5.6	106.17	708.03	24.3171	0.7060	0.0243
Styrene	ND	5.6	104.16	ND	23.8567	ND	0.0239
1,1,2,2-Tetrachloroethane	ND	2.8	169.87	ND	19.4534	ND	0.0195
o-Xylene	73	2.8	106.17	322.13	12.1585	0.3221	0.0122
1,3,5-Trimethylbenzene	ND	2.8	120.2	ND	13.7652	ND	0.0138
1,2,4-Trimethylbenzene	3	2.8	120.2	14.99	13.7652	0.0150	0.0138
Benzyl Chloride	ND	2.8	126.59	ND	14.4970	ND	0.0145
1,3-Dichlorobenzene	ND	2.8	147.01	ND	16.8355	ND	0.0168
1,4-Dichlorobenzene	ND	2.8	147.01	ND	16.8355	ND	0.0168
1,2-Dichlorobenzene	ND	2.8	147.01	ND	16.8355	ND	0.0168
1,2,4-Trichlorobenzene	ND	2.8	181.45	ND	20.7796	ND	0.0208
Hexachloro-1,3-Butadiene	ND	2.8	260.72	ND	29.6575	ND	0.0299
Notes: MW-molecular weight, RL-Reporting Limit, ND-None Detected							
Results are reported at 1 ATM and 20 degrees C.							

Table 3  
Summary of Soil Analytical Data - Metals  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification			SB-2-2	SB-2-3	SB-2-5	SB-3-2	SB-3-5	SB-4-2	SB-4-5	SB-4-10
Date Sampled			1/24/2002	1/24/2002	1/24/2002	1/24/2002	1/24/2002	1/25/2002	1/25/2002	1/25/2002
Depth (feet below ground surface)			2	3	5	2	5	2	5	10
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 6010B										
Title 22 Metals	Unit									
Antimony	mg/kg	0.75	ND	ND	ND	ND	ND	0.433J	ND	ND
Arsenic	mg/kg	0.75	ND	ND	ND	ND	ND	0.452J	0.943	0.305J
Barium	mg/kg	0.5	123	79.4	39.7	101	59.2	102	45.1	43.2
Beryllium	mg/kg	0.25	0.212J	0.205J	0.0793J	0.216J	0.129J	0.280	0.135J	0.140J
Cadmium	mg/kg	0.5	0.175J	0.0817J	ND	0.113J	0.0191J	0.462J	0.232J	0.227J
Chromium (Total)	mg/kg	0.25	9.67	8.07	2.62	9.62	4.59	11.3	5.56	8.25
Cobalt	mg/kg	0.25	8.16	6.27	2.38	7.81	4.32	8.78	4.33	4.99
Copper	mg/kg	0.5	12.4	8.49	3.55	10.3	5.08	10.7	5.13	4.98
Lead	mg/kg	0.5	5.98	1.99	0.828	2.36	1.23	3.01	1.40	1.27
Molybdenum	mg/kg	0.25	ND	ND	ND	ND	ND	0.0439J	ND	0.230J
Nickel	mg/kg	0.25	7.39	5.88	2.07	7.35	3.65	8.45	3.43	5.87
Selenium	mg/kg	0.75	0.305J	0.275J	ND	ND	ND	ND	ND	ND
Silver	mg/kg	0.25	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	mg/kg	0.75	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	mg/kg	0.25	28.3	21.8	7.84	24.6	14.2	26.4	18.1	17.6
Zinc	mg/kg	1	47.0	30.3	15.2	41.7	21.9	45.6	23.3	20.0
EPA 7471A										
Mercury	mg/kg	0.0835	0.0235J	0.0193J	0.0287J	0.0190J	0.0373J	0.0159J	0.0152J	0.0179J

Table 3  
Summary of Soil Analytical Data - Metals  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification			SB-4-15	SB-5-5	SB-5-10	SB-5-15	SB-6-5	SB-6-9	SB-7-5	SB-7-5-D
Date Sampled			1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002
Depth (feet below ground surface)			15	5	10	15	5	9	5	5
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 6010B										
Title 22 Metals	Unit									
Antimony	mg/kg	0.75	ND	0.344J	ND	ND	ND	ND	ND	ND
Arsenic	mg/kg	0.75	ND	0.802	0.444J	0.417J	0.254J	ND	0.244J	ND
Barium	mg/kg	0.5	43.6	97.2	52.0	62.0	95.4	83.6	92.5	96.9
Beryllium	mg/kg	0.25	0.106J	0.291	0.119J	0.164J	0.184J	0.141J	0.197J	0.258
Cadmium	mg/kg	0.5	0.181J	0.450J	0.172J	0.270J	0.606	0.613	0.508	0.652
Chromium (Total)	mg/kg	0.25	5.25	12.2	5.93	6.26	10.0	8.02	8.81	12.8
Cobalt	mg/kg	0.25	2.90	7.94	3.71	5.25	7.48	6.23	6.73	7.92
Copper	mg/kg	0.5	4.06	10.7	4.19	5.70	9.39	8.35	8.52	10.6
Lead	mg/kg	0.5	0.998	3.09	1.18	1.40	7.50	26.7	7.91	3.90
Molybdenum	mg/kg	0.25	0.280	ND	0.104J	ND	0.0634J	0.130J	ND	0.333
Nickel	mg/kg	0.25	3.04	8.41	4.05	4.43	7.33	5.98	6.71	10.6
Selenium	mg/kg	0.75	ND	ND	ND	ND	ND	ND	ND	ND
Silver	mg/kg	0.25	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	mg/kg	0.75	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	mg/kg	0.25	9.62	26.9	11.2	16.6	23.8	18.9	20.6	27.2
Zinc	mg/kg	1	19.6	39.2	18.8	26.4	53.3	202	35.9	41.2
EPA 7471A										
Mercury	mg/kg	0.0835	ND	0.0192J	0.0639J	0.0517J	0.0164J	0.0258J	0.0507J	0.0185J

Table 3  
Summary of Soil Analytical Data - Metals  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification			SB-7-10	SB-7-10-D	SB-7-15	SB-7-15-D	SB-8-5	SB-8-10	SB-8-15	SB-9-0.5
Date Sampled			1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/24/2002
Depth (feet below ground surface)			10	10	15	15	5	10	15	0.5
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 6010B										
Title 22 Metals	Unit									
Antimony	mg/kg	0.75	ND	ND	ND	ND	0.367J	0.234J	0.398J	ND
Arsenic	mg/kg	0.75	ND	ND	0.228J	ND	0.608J	1.75	0.695J	ND
Barium	mg/kg	0.5	48.1	72.5	58.5	54.2	49.8	143	83.2	77.8
Beryllium	mg/kg	0.25	0.117J	0.186J	0.110J	0.0809J	0.145J	0.583	0.247J	0.203J
Cadmium	mg/kg	0.5	0.405J	0.479J	0.354J	0.298J	0.202J	0.628	0.340J	0.0932J
Chromium (Total)	mg/kg	0.25	5.57	8.68	5.31	5.33	5.65	20.1	10.7	7.94
Cobalt	mg/kg	0.25	4.75	6.38	4.78	4.52	4.00	11.1	7.42	6.37
Copper	mg/kg	0.5	4.87	8.05	4.84	5.32	7.60	21.0	9.18	9.31
Lead	mg/kg	0.5	4.20	2.83	1.16	1.13	2.00	5.38	2.29	4.72
Molybdenum	mg/kg	0.25	ND	0.0343J	ND	ND	0.167J	0.110J	0.131J	0.0592J
Nickel	mg/kg	0.25	3.75	6.22	3.89	3.88	4.45	14.3	7.84	6.39
Selenium	mg/kg	0.75	ND	ND	ND	ND	ND	ND	ND	0.424J
Silver	mg/kg	0.25	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	mg/kg	0.75	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	mg/kg	0.25	18.4	20.6	15.7	13.7	13.5	38.0	21.9	20.3
Zinc	mg/kg	1	25.1	33.5	22.4	18.9	21.2	47.8	35.2	35.4
EPA 7471A										
Mercury	mg/kg	0.0835	0.0319J	0.0341J	0.0237J	0.0184J	0.0643J	0.0490J	0.0401J	0.0175J

Table 3  
Summary of Soil Analytical Data - Metals  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification			SB-9-7	SB-10-0.5	SB-10-7	SB-10-10	SB-10-12	SB-11-0.5	SB-11-7	SB-11-10
Date Sampled			1/24/2002	1/23/2002	1/23/2002	1/23/2002	1/23/2002	1/23/2002	1/23/2002	1/23/2002
Depth (feet below ground surface)			7	0.5	7	10	12	0.5	7	10
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 6010B										
Title 22 Metals	Unit									
Antimony	mg/kg	0.75	ND	0.198J	0.23J	ND	ND	1.56	0.215J	ND
Arsenic	mg/kg	0.75	ND	ND	ND	ND	ND	ND	ND	0.133J
Barium	mg/kg	0.5	162	69.7	41.7	36.1	30.9	304	47.1	63.2
Beryllium	mg/kg	0.25	0.342	0.162J	0.0728J	0.0619J	0.0632J	0.161J	0.0835J	0.132J
Cadmium	mg/kg	0.5	0.219J	0.235J	0.0834J	0.0682J	0.0706J	0.522	0.125J	0.196J
Chromium (Total)	mg/kg	0.25	16.8	7.48	3.6	2.81	3.25	10.4	4.56	6.87
Cobalt	mg/kg	0.25	12.4	5.9	3.13	2.42	2.42	13.1	3.17	5.22
Copper	mg/kg	0.5	19.9	8.02	3.37	3.32	3.25	11.8	4.14	5.76
Lead	mg/kg	0.5	3.00	4.67	1.03	0.937	0.839	1.01	1.03	1.3
Molybdenum	mg/kg	0.25	ND	ND	ND	0.183J	0.0377J	ND	0.201J	ND
Nickel	mg/kg	0.25	12.5	5.62	2.65	2.17	2.49	7.7	3.34	4.79
Selenium	mg/kg	0.75	1.64	ND	ND	ND	ND	ND	0.405J	ND
Silver	mg/kg	0.25	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	mg/kg	0.75	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	mg/kg	0.25	40.0	19.2	9.24	6.74	7.52	49.8	10.2	17.6
Zinc	mg/kg	1	59.5	31.3	14.9	11.9	12	53	17.7	23.8
EPA 7471A										
Mercury	mg/kg	0.0835	0.0425J	0.245	ND	0.0182J	0.0187J	ND	0.0187J	ND



Table 3  
Summary of Soil Analytical Data - Metals  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification			SB-11-12	SB-12-0.5	SB-12-7	SB-13-0.5	SB-13-7	SB-13-10	SB-13-12	SB-14-0.5
Date Sampled			1/23/2002	1/24/2002	1/24/2002	1/23/2002	1/23/2002	1/23/2002	1/23/2002	1/28/2002
Depth (feet below ground surface)			12	0.5	7	0.5	7	10	12	0.5
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 6010B										
Title 22 Metals	Unit									
Antimony	mg/kg	0.75	ND	ND	ND	1.3	0.319J	0.381J	0.212J	ND
Arsenic	mg/kg	0.75	0.315J	ND	0.176J	0.43J	ND	ND	ND	ND
Barium	mg/kg	0.5	43	54.0	65.5	286	61.7	64	111	112
Beryllium	mg/kg	0.25	0.0952J	0.124J	0.146J	0.173J	0.141J	0.134J	0.284	0.292
Cadmium	mg/kg	0.5	0.103J	0.0249J	0.0314J	0.664	0.176J	0.169J	0.404J	0.317J
Chromium (Total)	mg/kg	0.25	4.72	4.55	5.23	10.7	6.83	6.16	14.1	12.4
Cobalt	mg/kg	0.25	3.37	4.22	4.62	12.9	5.45	5.2	9.23	8.67
Copper	mg/kg	0.5	4.09	5.20	8.83	13.4	5.94	5.92	12.9	13.9
Lead	mg/kg	0.5	1.21	1.73	1.35	18.3	1.46	1.28	2.73	16.9
Molybdenum	mg/kg	0.25	0.229J	ND	0.0648J	ND	0.0547J	0.0211J	0.0278J	0.101J
Nickel	mg/kg	0.25	2.98	3.68	4.09	8.43	5.07	5.19	10.2	9.53
Selenium	mg/kg	0.75	ND	0.436J	ND	ND	ND	ND	0.787	ND
Silver	mg/kg	0.25	ND	ND	ND	ND	ND	ND	ND	0.0427J
Thallium	mg/kg	0.75	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	mg/kg	0.25	10.5	13.0	14.9	46.2	16.7	16	29.5	26.8
Zinc	mg/kg	1	16.2	22.0	26.1	63.4	24.7	23.8	40.1	57.0
EPA 7471A										
Mercury	mg/kg	0.0835	0.0307J	0.0244J	0.0219J	ND	0.0183J	0.0142J	0.0133J	0.0699J

Table 3  
Summary of Soil Analytical Data - Metals  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification			SB-14-7	SB-15-0.5	SB-15-7	SB-16-0.5	SB-16-7	SB-17-0.5	SB-17-7	SB-18-0.5
Date Sampled			1/28/2002	1/24/2002	1/24/2002	1/24/2002	1/24/2002	1/24/2002	1/24/2002	1/24/2002
Depth (feet below ground surface)			7	0.5	7	0.5	7	0.5	7	0.5
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 6010B										
Title 22 Metals	Unit									
Antimony	mg/kg	0.75	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	mg/kg	0.75	0.313J	ND	ND	ND	0.194J	ND	ND	0.391J
Barium	mg/kg	0.5	38.2	84.9	63.5	91.5	94.3	83.2	122	92.3
Beryllium	mg/kg	0.25	0.0795J	0.243J	0.161J	0.210J	0.228J	0.223J	0.228J	0.241J
Cadmium	mg/kg	0.5	0.0751J	0.112J	0.0662J	0.0948J	0.0827J	0.111J	0.108J	0.129J
Chromium (Total)	mg/kg	0.25	2.85	10.1	6.50	9.28	8.93	8.38	10.3	9.93
Cobalt	mg/kg	0.25	2.62	7.44	4.80	7.62	6.93	6.80	8.78	7.57
Copper	mg/kg	0.5	3.45	10.8	9.25	9.56	9.58	9.31	10.6	11.5
Lead	mg/kg	0.5	1.04	3.03	2.14	2.41	2.95	4.73	1.96	5.49
Molybdenum	mg/kg	0.25	0.0662J	0.0347J	0.0638J	ND	0.0587J	ND	ND	0.0522J
Nickel	mg/kg	0.25	2.51	7.72	4.87	7.07	7.01	6.62	7.73	7.69
Selenium	mg/kg	0.75	ND	ND	ND	ND	0.295J	ND	ND	0.548J
Silver	mg/kg	0.25	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	mg/kg	0.75	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	mg/kg	0.25	8.58	24.4	14.8	23.6	22.0	20.8	28.9	24.7
Zinc	mg/kg	1	19.9	38.7	26.3	39.2	37.4	36.4	41.7	42.0
EPA 7471A										
Mercury	mg/kg	0.0835	0.0353J	0.0424J	0.0179J	0.0211J	0.0427J	0.0154J	ND	0.0464J

Table 3  
Summary of Soil Analytical Data - Metals  
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Los Angeles, California

Sample Identification			SB-18-7	SB-19-0.5	SB-19-7	SB-20-0.5	SB-20-7	SB-20-10	SB-20-12	SB-21-0.5
Date Sampled			1/24/2002	1/28/2002	1/28/2002	1/23/2002	1/23/2002	1/23/2002	1/23/2002	1/25/2002
Depth (feet below ground surface)			7	0.5	7	0.5	7	10	12	0.5
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 6010B Title 22 Metals			Unit							
Antimony	mg/kg	0.75	ND	ND	ND	0.72J	ND	ND	ND	ND
Arsenic	mg/kg	0.75	ND	ND	ND	ND	ND	ND	ND	0.454J
Barium	mg/kg	0.5	90.0	80.1	92.2	315	31.7	54.4	42.8	91.5
Beryllium	mg/kg	0.25	0.183J	0.203J	0.197J	0.142J	0.0681J	0.102J	0.0938J	0.284
Cadmium	mg/kg	0.5	0.0815J	0.275J	0.285J	0.518	0.0579J	0.119J	0.112J	0.506
Chromium (Total)	mg/kg	0.25	7.55	9.02	11.2	10.1	2.13	4.37	5.22	11.8
Cobalt	mg/kg	0.25	6.72	7.02	7.38	14.0	2.12	3.68	3.47	8.02
Copper	mg/kg	0.5	8.19	8.74	8.64	11	2.72	4.21	4.4	10.9
Lead	mg/kg	0.5	1.71	4.10	2.08	1.22	0.926	1.12	0.967	8.45
Molybdenum	mg/kg	0.25	ND	0.0691J	ND	ND	ND	ND	0.0409J	0.0457J
Nickel	mg/kg	0.25	5.81	6.99	8.04	8.07	1.81	3.57	3.74	8.40
Selenium	mg/kg	0.75	ND	ND	ND	ND	ND	ND	0.249J	ND
Silver	mg/kg	0.25	ND	ND	ND	0.0305J	ND	ND	ND	ND
Thallium	mg/kg	0.75	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	mg/kg	0.25	21.2	23.6	23.6	47.2	6.6	11.5	10.9	26.8
Zinc	mg/kg	1	32.8	39.3	37.9	52.6	10.8	16.2	16.4	50.1
EPA 7471A										
Mercury	mg/kg	0.0835	0.0580J	ND	ND	ND	ND	0.0155J	ND	0.0130J

Table 3  
Summary of Soil Analytical Data - Metals  
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Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification			SB-21-7	SB-22-0.5	SB-22-7	SB-23-0.5	SB-23-7	SB-24-0.5	SB-24-7	SB-25-0.5
Date Sampled			1/28/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/24/2002	1/24/2002	1/24/2002
Depth (feet below ground surface)			7	0.5	7	0.5	7	0.5	7	0.5
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 6010B										
Title 22 Metals	Unit									
Antimony	mg/kg	0.75	ND	0.383J	ND	0.207J	0.370J	ND	ND	ND
Arsenic	mg/kg	0.75	0.496J	0.728J	0.711J	0.797	0.476J	ND	ND	ND
Barium	mg/kg	0.5	81.4	49.3	73.9	69.8	65.6	83.4	78.5	79.3
Beryllium	mg/kg	0.25	0.186J	0.144J	0.211J	0.185J	0.201J	0.191J	0.166J	0.224J
Cadmium	mg/kg	0.5	0.502	0.209J	0.342J	0.409J	0.332J	0.0868J	0.347J	0.269J
Chromium (Total)	mg/kg	0.25	18.1	5.87	8.62	9.40	7.98	7.87	6.95	45.6
Cobalt	mg/kg	0.25	5.92	4.40	6.39	5.86	5.95	6.29	5.98	13.3
Copper	mg/kg	0.5	9.90	5.59	7.94	9.14	7.59	8.66	8.28	15.0
Lead	mg/kg	0.5	39.3	3.15	7.20	17.0	3.34	5.83	12.5	7.29
Molybdenum	mg/kg	0.25	1.53	0.169J	0.0209J	0.0716J	0.0409J	0.0516J	0.0657J	ND
Nickel	mg/kg	0.25	6.77	4.55	6.11	6.37	5.68	6.07	5.91	17.9
Selenium	mg/kg	0.75	ND	ND	ND	ND	ND	ND	0.229J	ND
Silver	mg/kg	0.25	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	mg/kg	0.75	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	mg/kg	0.25	22.0	13.5	21.1	19.7	20.4	21.2	19.5	64.6
Zinc	mg/kg	1	38.1	29.1	35.7	43.4	29.8	34.6	153	53.2
EPA 7471A										
Mercury	mg/kg	0.0835	ND	0.0456J	0.0416J	0.0493J	0.0227J	0.0245J	0.0185J	0.0329J

Table 3  
Summary of Soil Analytical Data - Metals  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification			SB-25-7	SB-26-0.5	SB-26-7	SB-28-2	SB-28-7	SB-29-2	SB-29-7	SB-31-0.5
Date Sampled			1/24/2002	1/24/2002	1/24/2002	1/25/2002	1/25/2002	2/1/2002	2/1/2002	1/23/2002
Depth (feet below ground surface)			7	0.5	7	2	7	2	7	0.5
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 6010B										
Title 22 Metals	Unit									
Antimony	mg/kg	0.75	ND	ND	ND	0.499J	0.376J	0.520J	0.342J	0.229J
Arsenic	mg/kg	0.75	ND	0.142J	ND	0.372J	0.317J	ND	ND	0.142J
Barium	mg/kg	0.5	57.2	199	53.2	85.6	114	67.6	51.3	76.7
Beryllium	mg/kg	0.25	0.145J	0.210J	0.138J	0.290	0.414	0.220J	0.142J	0.207J
Cadmium	mg/kg	0.5	0.0628J	0.713	0.0459J	0.810	1.25	0.172J	0.120J	0.283J
Chromium (Total)	mg/kg	0.25	6.92	12.4	5.40	9.55	14.1	8.20	4.53	8.62
Cobalt	mg/kg	0.25	5.20	9.69	4.61	7.43	11.0	6.87	3.85	6.6
Copper	mg/kg	0.5	6.45	19.4	6.02	51.4	15.5	6.91	3.86	9.18
Lead	mg/kg	0.5	16.2	17.4	4.69	8.50	3.92	1.99	1.60	5.67
Molybdenum	mg/kg	0.25	ND	0.415	ND	1.58	ND	0.0441J	ND	0.0518J
Nickel	mg/kg	0.25	4.78	9.49	4.11	7.13	16.1	5.93	3.53	6.54
Selenium	mg/kg	0.75	0.402J	ND	ND	ND	ND	ND	ND	ND
Silver	mg/kg	0.25	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	mg/kg	0.75	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	mg/kg	0.25	17.6	33.8	15.5	23.9	32.7	17.5	11.7	20.6
Zinc	mg/kg	1	27.7	78.7	26.7	47.9	112	29.7	19.4	35.4
EPA 7471A										
Mercury	mg/kg	0.0835	0.0179J	0.154	0.0369J	0.0469J	0.0609J	0.0222J	0.0225J	0.0181J



Table 3  
Summary of Soil Analytical Data - Metals  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification			SB-31-7	SB-31-10	SB-31-12	SB-32-5	SB-32-5-D	SB-32-10	SB-32-10-D	SB-32-15
Date Sampled			1/23/2002	1/23/2002	1/23/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002
Depth (feet below ground surface)			7	10	12	5	5	10	10	15
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 6010B										
Title 22 Metals	Unit									
Antimony	mg/kg	0.75	ND	0.297J	0.336J	ND	ND	ND	ND	ND
Arsenic	mg/kg	0.75	ND	ND	ND	1.00	1.03	ND	ND	0.325J
Barium	mg/kg	0.5	45	60.1	91.4	77.2	80.7	142	126	61.8
Beryllium	mg/kg	0.25	0.102J	0.126J	0.279	0.182J	0.224J	0.455	0.407	0.156J
Cadmium	mg/kg	0.5	0.12J	0.168J	0.349J	0.285J	0.375J	0.649	0.631	0.199J
Chromium (Total)	mg/kg	0.25	3.17	6.89	13.5	7.38	9.18	13.6	13.8	4.91
Cobalt	mg/kg	0.25	3.4	5.04	8.73	5.44	6.68	11.0	10.6	4.46
Copper	mg/kg	0.5	3.88	5.54	12.2	7.33	8.39	18.3	16.2	4.68
Lead	mg/kg	0.5	1.17	1.35	2.55	2.29	3.30	4.01	3.75	1.30
Molybdenum	mg/kg	0.25	ND	0.0233J	0.0436J	0.0954J	0.182J	0.0501J	ND	ND
Nickel	mg/kg	0.25	2.66	4.75	9.91	5.34	7.34	9.79	10.0	3.88
Selenium	mg/kg	0.75	ND	ND	ND	ND	ND	ND	ND	ND
Silver	mg/kg	0.25	0.111J	ND	ND	ND	ND	ND	ND	ND
Thallium	mg/kg	0.75	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	mg/kg	0.25	9.86	15.4	27.2	16.7	21.2	35.5	33.3	12.7
Zinc	mg/kg	1	16.3	23.0	38.5	27.6	35.8	56.0	52.1	26.1
EPA 7471A										
Mercury	mg/kg	0.0835	0.0669J	0.0149J	0.0166J	ND	0.0516J	0.0294J	0.0327J	ND

Table 3  
Summary of Soil Analytical Data - Metals  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification			SB-32-15-D	SB-33-5	SB-33-10	SB-33-15	SB-34-20	SB-34-30
Date Sampled			1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/28/2002	1/28/2002
Depth (feet below ground surface)			15	5	10	15	20	30
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 6010B								
Title 22 Metals	Unit							
Antimony	mg/kg	0.75	0.338J	ND	ND	ND	ND	ND
Arsenic	mg/kg	0.75	0.804	ND	0.451J	ND	ND	ND
Barium	mg/kg	0.5	63.1	134	67.8	59.3	73.5	145
Beryllium	mg/kg	0.25	0.166J	0.415	0.131J	0.123J	0.161J	0.161J
Cadmium	mg/kg	0.5	0.309J	0.941	0.364J	0.343J	0.203J	0.493J
Chromium (Total)	mg/kg	0.25	8.35	16.6	6.63	6.08	12.7	13.5
Cobalt	mg/kg	0.25	5.93	11.8	5.21	4.73	5.70	10.1
Copper	mg/kg	0.5	6.50	17.3	5.50	4.96	8.37	15.8
Lead	mg/kg	0.5	2.18	3.94	1.42	1.32	2.50	1.34
Molybdenum	mg/kg	0.25	0.0465J	0.116J	0.0322J	ND	0.964	0.0785J
Nickel	mg/kg	0.25	5.60	11.9	4.84	4.26	6.39	9.33
Selenium	mg/kg	0.75	ND	ND	ND	ND	ND	ND
Silver	mg/kg	0.25	ND	ND	ND	ND	ND	ND
Thallium	mg/kg	0.75	ND	ND	ND	ND	ND	ND
Vanadium	mg/kg	0.25	19.1	37.6	16.2	15.3	18.4	25.0
Zinc	mg/kg	1	28.4	55.5	23.6	23.2	30.5	38.6
EPA 7471A								
Mercury	mg/kg	0.0835	ND	0.0289J	ND	0.0173J	ND	ND

**Table 4**  
**Summary of Soil Analytical Data - TPH**  
**Proposed East Valley Middle School No. 1**  
**Laurel Canyon Boulevard and Hamlin Street**  
**Los Angeles, California**

Sample Identification		SB-4-2	SB-4-5	SB-4-10	SB-4-15	SB-5-5	SB-5-10	SB-5-15	SB-6-5	SB-6-9	SB-7-5	SB-7-10	SB-7-15
Date Sampled		1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002
Depth (feet below ground surface)		2	5	10	15	5	10	15	5	9	5	10	15
		MOL	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8015M													
TPH - Carbon Range		Unit											
C7	mg/kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C8	mg/kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C9-C10	mg/kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C11-C12	mg/kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C13-C14	mg/kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C15-C16	mg/kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C17-C18	mg/kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C19-C20	mg/kg		ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND
C21-C22	mg/kg		ND	ND	ND	ND	ND	ND	0.81	11	ND	ND	ND
C23-C24	mg/kg		ND	ND	ND	ND	ND	ND	1.8	24	ND	ND	ND
C25-C28	mg/kg		ND	ND	ND	ND	ND	ND	9.4	100	ND	ND	ND
C29-C32	mg/kg		ND	ND	ND	ND	ND	ND	19	150	ND	ND	ND
C33-C36	mg/kg		ND	ND	ND	ND	ND	ND	12	84	ND	ND	ND
C7-C36 Total	mg/kg	5.0	ND	ND	ND	ND	ND	ND	43	370	ND	ND	ND

Sample Identification		SB-8-5	SB-8-5-D	SB-8-10	SB-8-10-D	SB-8-15	SB-29-2	SB-29-7	SB-32-5	SB-32-10	SB-32-15	SB-33-5	SB-33-10	SB-33-15
Date Sampled		1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	2/1/2002	2/1/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002
Depth (feet below ground surface)		5	5	10	10	15	2	7	5	10	15	5	10	15
		MDL	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8015M														
TPH - Carbon Range		Unit												
C7	mg/kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C8	mg/kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C9-C10	mg/kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C11-C12	mg/kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C13-C14	mg/kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C15-C16	mg/kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C17-C18	mg/kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C19-C20	mg/kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C21-C22	mg/kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C23-C24	mg/kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C25-C28	mg/kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C29-C32	mg/kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C33-C36	mg/kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C7-C36 Total	mg/kg	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 5  
Summary of Soil Analytical Data - Pesticides  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification			SB-1-1	SB-1-3	SB-3-2	SB-3-5	SB-21-0.5	SB-21-7	SB-30-1	SB-30-3	SB-30-3-D	SB-30-5
Date Sampled			1/25/2002	1/25/2002	1/24/2002	1/24/2002	1/25/2002	1/28/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002
Depth (feet below ground surface)			1	3	2	3	0.5	7	1	3	3	5
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8081A												
Pesticides	Unit											
Alpha-BHC	µg/kg	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC	µg/kg	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	µg/kg	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	µg/kg	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Delta-BHC	µg/kg	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	µg/kg	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	µg/kg	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	µg/kg	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	µg/kg	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	µg/kg	5.0	2.1	ND	ND	ND	3.4	ND	ND	ND	ND	ND
Endrin	µg/kg	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin Aldehyde	µg/kg	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	µg/kg	5.0	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND
Endosulfan II	µg/kg	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	µg/kg	5.0	2.9	ND	ND	ND	19	ND	3.6	3.7	ND	ND
Endosulfan Sulfate	µg/kg	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	µg/kg	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane	µg/kg	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	µg/kg	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin Ketone	µg/kg	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 6  
Summary of Soil Analytical Data - PCBs  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification			SB-1-1	SB-1-3	SB-1-3-D	SB-2-2	SB-2-3	SB-2-5	SB-9-0.5	SB-9-7
Date Sampled			1/25/2002	1/25/2002	1/25/2002	1/24/2002	1/24/2002	1/24/2002	1/24/2002	1/24/2002
Depth (feet below ground surface)			1	3	3	2	3	5	0.5	7
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8082 PCBs			Unit							
Aroclor-1016	µg/kg	50	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	µg/kg	50	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	µg/kg	50	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	µg/kg	50	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	µg/kg	50	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1254	µg/kg	50	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260	µg/kg	50	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1262	µg/kg	50	ND	ND	ND	ND	ND	ND	ND	ND

Sample Identification			SB-14-0.5	SB-14-7	SB-21-0.5	SB-21-7	SB-25-0.5	SB-25-7	SB-34-30
Date Sampled			1/28/2002	1/28/2002	1/25/2002	1/28/2002	1/24/2002	1/24/2002	1/28/2002
Depth (feet below ground surface)			0.5	7	0.5	7	0.5	7	30
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8082 PCBs			Unit						
Aroclor-1016	µg/kg	50	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	µg/kg	50	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	µg/kg	50	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	µg/kg	50	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	µg/kg	50	ND	ND	ND	ND	ND	ND	ND
Aroclor-1254	µg/kg	50	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260	µg/kg	50	ND	ND	ND	ND	ND	ND	ND
Aroclor-1262	µg/kg	50	ND	ND	ND	ND	ND	ND	ND



Table 7  
Summary of Soil Analytical Data - SVOCs  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification		SB-2-2	SB-2-3	SB-2-5	SB-3-2	SB-3-5	SB-4-2	SB-4-5	SB-4-10
Date Sampled		1/24/2002	1/24/2002	1/24/2002	1/24/2002	1/24/2002	1/25/2002	1/25/2002	1/25/2002
Depth (feet below ground surface)		2	3	5	2	5	2	5	10
	MDL	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C									
Semi-Volatile Organics	Unit								
N-Nitrosodimethylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Aniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Phenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethyl) Ether	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroisopropyl) Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
3/4-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
Isophorone	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethoxy) Methane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Naphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Hexachloro-1,3-Butadiene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	mg/kg	1.5	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Dimethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND

**Table 7**  
**Summary of Soil Analytical Data - SVOCs**  
**Proposed East Valley Middle School No. 1**  
**Laurel Canyon Boulevard and Hamlin Street**  
**Los Angeles, California**

Sample Identification		SB-2-2	SB-2-3	SB-2-5	SB-3-2	SB-3-5	SB-4-2	SB-4-5	SB-4-10
Date Sampled		1/24/2002	1/24/2002	1/24/2002	1/24/2002	1/24/2002	1/25/2002	1/25/2002	1/25/2002
Depth (feet below ground surface)		2	3	5	2	5	2	5	10
MDL		Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C									
Semi-Volatile Organics(cont.)	Unit								
4-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Diethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Fluorene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Azobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-Methylphenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Di-n-Butyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzidine	mg/kg	10	ND	ND	ND	ND	ND	ND	ND
Pyrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Pyridine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Butyl Benzyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Bis(2-Ethylhexyl) Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Chrysene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Di-n-Octyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzo (k) Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (b) Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Pyrene	mg/kg	0.35	ND	ND	ND	ND	ND	ND	ND
Indeno (1,2,3-c,d) Pyrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Dibenz (a,h) Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (g,h,i) Perylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND

Table 7  
Summary of Soil Analytical Data - SVOCs  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification			SB-4-15	SB-5-5	SB-5-10	SB-5-15	SB-6-5	SB-6-9	SB-7-5	SB-7-5-D
Date Sampled			1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002
Depth (feet below ground surface)			15	5	10	5	5	9	5	5
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C										
Semi-Volatile Organics										
	Unit									
N-Nitrosodimethylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethyl) Ether	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroisopropyl) Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
3/4-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethoxy) Methane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloro-1,3-Butadiene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	mg/kg	1.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND

Table 7  
Summary of Soil Analytical Data - SVOCs  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification		SB-4-15	SB-5-5	SB-5-10	SB-5-15	SB-6-5	SB-6-9	SB-7-5	SB-7-5-D
Date Sampled		1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002
Depth (feet below ground surface)		15	5	10	5	5	9	5	5
		MDL	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C									
Semi-Volatile Organics(cont.)	Unit								
4-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Diethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Fluorene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Azobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-Methylphenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Di-n-Butyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzidine	mg/kg	10	ND	ND	ND	ND	ND	ND	ND
Pyrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Pyridine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Butyl Benzyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Bis(2-Ethylhexyl) Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Chrysene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Di-n-Octyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzo (k) Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (b) Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Pyrene	mg/kg	0.35	ND	ND	ND	ND	ND	ND	ND
Indeno (1,2,3-c,d) Pyrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Dibenz (a,h) Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (g,h,i) Perylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND



Table 7  
Summary of Soil Analytical Data - SVOCs  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification			SB-7-10	SB-7-10-D	SB-7-15	SB-7-15-D	SB-8-5	SB-8-10	SB-8-15	SB-9-0.5
Date Sampled			1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/24/2002
Depth (feet below ground surface)			10	10	15	15	5	10	15	0.5
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C										
Semi-Volatile Organics	Unit									
N-Nitrosodimethylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethyl) Ether	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroisopropyl) Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
3/4-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethoxy) Methane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloro-1,3-Butadiene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	mg/kg	1.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND



Table 7  
Summary of Soil Analytical Data - SVOCs  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification		SB-7-10	SB-7-10-D	SB-7-15	SB-7-15-D	SB-8-5	SB-8-10	SB-8-15	SB-9-0.5
Date Sampled		1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/24/2002
Depth (feet below ground surface)		10	10	15	15	5	10	15	0.5
MDL		Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C									
Semi-Volatile Organics(cont.)	Unit								
4-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Diethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Fluorene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Azobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-Methylphenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Di-n-Butyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzidine	mg/kg	10	ND	ND	ND	ND	ND	ND	ND
Pyrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Pyridine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Butyl Benzyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Bis(2-Ethylhexyl) Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Chrysene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Di-n-Octyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzo (k) Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (b) Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Pyrene	mg/kg	0.35	ND	ND	ND	ND	ND	ND	ND
Indeno (1,2,3-c,d) Pyrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Dibenz (a,h) Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (g,h,i) Perylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND

Table 7  
Summary of Soil Analytical Data - SVOCs  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification			SB-9-7	SB-10-0.5	SB-10-7	SB-11-0.5	SB-11-7	SB-12-0.5	SB-12-7	SB-13-0.5
Date Sampled			1/24/2002	1/23/2002	1/23/2002	1/23/2002	1/23/2002	1/24/2002	1/24/2002	1/23/2002
Depth (feet below ground surface)			7	0.5	7	0.5	7	0.5	7	0.5
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C										
Semi-Volatile Organics	Unit									
N-Nitrosodimethylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethyl) Ether	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroisopropyl) Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
3/4-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethoxy) Methane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloro-1,3-Butadiene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	mg/kg	1.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND

Table 7  
Summary of Soil Analytical Data - SVOCs  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification		SB-9-7	SB-10-0.5	SB-10-7	SB-11-0.5	SB-11-7	SB-12-0.5	SB-12-7	SB-13-0.5
Date Sampled		1/24/2002	1/23/2002	1/23/2002	1/23/2002	1/23/2002	1/24/2002	1/24/2002	1/23/2002
Depth (feet below ground surface)		7	0.5	7	0.5	7	0.5	7	0.5
MDL		Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C									
Semi-Volatile Organics(cont.)	Unit								
4-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Diethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Fluorene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Azobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-Methylphenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Di-n-Butyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzidine	mg/kg	10	ND	ND	ND	ND	ND	ND	ND
Pyrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Pyridine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Butyl Benzyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Bis(2-Ethylhexyl) Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Chrysene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Di-n-Octyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzo (k) Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (b) Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Pyrene	mg/kg	0.35	ND	ND	ND	ND	ND	ND	ND
Indeno (1,2,3-c,d) Pyrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Dibenz (a,h) Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (g,h,i) Perylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND

Table 7  
Summary of Soil Analytical Data - SVOCs  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification			SB-13-7	SB-14-0.5	SB-14-7	SB-15-0.5	SB-15-7	SB-16-0.5	SB-16-7	SB-17-0.5
Date Sampled			1/23/2002	1/28/2002	1/28/2002	1/24/2002	1/24/2002	1/24/2002	1/24/2002	1/24/2002
Depth (feet below ground surface)			7	0.5	7	0.5	7	0.5	7	0.5
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C										
Semi-Volatile Organics										
	Unit									
N-Nitrosodimethylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethyl) Ether	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroisopropyl) Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
3/4-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethoxy) Methane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloro-1,3-Butadiene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	mg/kg	1.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND



Table 7  
Summary of Soil Analytical Data - SVOCs  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification			SB-13-7	SB-14-0.5	SB-14-7	SB-15-0.5	SB-15-7	SB-16-0.5	SB-16-7	SB-17-0.5
Date Sampled			1/23/2002	1/28/2002	1/28/2002	1/24/2002	1/24/2002	1/24/2002	1/24/2002	1/24/2002
Depth (feet below ground surface)			7	0.5	7	0.5	7	0.5	7	0.5
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C										
Semi-Volatile Organics(cont.)	Unit									
4-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Azobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-Methylphenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-Butyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
Benzidine	mg/kg	10	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
Pyridine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Butyl Benzyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Ethylhexyl) Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-Octyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (k) Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (b) Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Pyrene	mg/kg	0.35	ND	ND	ND	ND	ND	ND	ND	ND
Indeno (1,2,3-c,d) Pyrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz (a,h) Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (g,h,i) Perylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND



Table 7  
Summary of Soil Analytical Data - SVOCs  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification			SB-17-7	SB-18-0.5	SB-18-7	SB-19-0.5	SB-19-7	SB-20-0.5	SB-20-7	SB-21-0.5
Date Sampled			1/24/2002	1/24/2002	1/24/2002	1/28/2002	1/28/2002	1/23/2002	1/23/2002	1/25/2002
Depth (feet below ground surface)			7	0.5	7	0.5	7	0.5	7	0.5
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C										
Semi-Volatile Organics	Unit									
N-Nitrosodimethylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethyl) Ether	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroisopropyl) Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
3/4-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethoxy) Methane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloro-1,3-Butadiene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	mg/kg	1.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND

**Table 7**  
**Summary of Soil Analytical Data - SVOCs**  
**Proposed East Valley Middle School No. 1**  
**Laurel Canyon Boulevard and Hamlin Street**  
**Los Angeles, California**

Sample Identification		SB-17-7	SB-18-0.5	SB-18-7	SB-19-0.5	SB-19-7	SB-20-0.5	SB-20-7	SB-21-0.5
Date Sampled		1/24/2002	1/24/2002	1/24/2002	1/28/2002	1/28/2002	1/23/2002	1/23/2002	1/25/2002
Depth (feet below ground surface)		7	0.5	7	0.5	7	0.5	7	0.5
	MDL	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C									
Semi-Volatile Organics(cont.)	Unit								
4-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Diethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Fluorene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Azobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-Methylphenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	1.1
Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	0.32J
Di-n-Butyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	9.5
Benzidine	mg/kg	10	ND	ND	ND	ND	ND	ND	ND
Pyrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	8.5
Pyridine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Butyl Benzyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	8.2
Bis(2-Ethylhexyl) Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Chrysene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	8.1
Di-n-Octyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzo (k) Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	7.5
Benzo (b) Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	7.4
Benzo (a) Pyrene	mg/kg	0.35	ND	ND	ND	ND	ND	ND	7.5
Indeno (1,2,3-c,d) Pyrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	2.6
Dibenz (a,h) Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	0.82
Benzo (g,h,i) Perylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	2.2

**Table 7**  
**Summary of Soil Analytical Data - SVOCs**  
**Proposed East Valley Middle School No. 1**  
**Laurel Canyon Boulevard and Hamlin Street**  
**Los Angeles, California**

Sample Identification			SB-21-0.5-R	SB-21-0.5-H	SB-21-7	SB-22-0.5	SB-22-7	SB-23-0.5	SB-23-7	SB-24-0.5
Date Sampled			1/25/2002	1/25/2002	1/28/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/24/2002
Depth (feet below ground surface)			0.5	0.5	7	0.5	7	0.5	7	0.5
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C										
Semi-Volatile Organics	Unit									
N-Nitrosodimethylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethyl) Ether	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroisopropyl) Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
3/4-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethoxy) Methane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloro-1,3-Butadiene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	mg/kg	1.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND

Table 7  
Summary of Soil Analytical Data - SVOCs  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification		SB-21-0.5-R	SB-21-0.5-H	SB-21-7	SB-22-0.5	SB-22-7	SB-23-0.5	SB-23-7	SB-24-0.5
Date Sampled		1/25/2002	1/25/2002	1/28/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/24/2002
Depth (feet below ground surface)		0.5	0.5	7	0.5	7	0.5	7	0.5
MDL		Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C									
Semi-Volatile Organics(cont.)	Unit								
4-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Diethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Fluorene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Azobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-Methylphenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	mg/kg	0.4	0.42	1.6	ND	ND	ND	ND	ND
Anthracene	mg/kg	0.4	0.13J	0.54	ND	ND	ND	ND	ND
Di-n-Butyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	mg/kg	0.4	3.3	14	ND	ND	ND	ND	ND
Benzidine	mg/kg	10	ND	ND	ND	ND	ND	ND	ND
Pyrene	mg/kg	0.4	3.4	14	ND	ND	ND	ND	ND
Pyridine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Butyl Benzyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Anthracene	mg/kg	0.4	3.0	13	ND	ND	ND	ND	ND
Bis(2-Ethylhexyl) Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Chrysene	mg/kg	0.4	2.9	13	ND	ND	ND	ND	ND
Di-n-Octyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzo (k) Fluoranthene	mg/kg	0.4	2.6	11	ND	ND	ND	ND	ND
Benzo (b) Fluoranthene	mg/kg	0.4	2.8	12	ND	ND	ND	ND	ND
Benzo (a) Pyrene	mg/kg	0.35	2.7	12	ND	ND	ND	ND	ND
Indeno (1,2,3-c,d) Pyrene	mg/kg	0.4	1.2	4.7	ND	ND	ND	ND	ND
Dibenz (a,h) Anthracene	mg/kg	0.4	0.42	1.6	ND	ND	ND	ND	ND
Benzo (g,h,i) Perylene	mg/kg	0.4	1.0	4.2	ND	ND	ND	ND	ND



**Table 7**  
**Summary of Soil Analytical Data - SVOCs**  
**Proposed East Valley Middle School No. 1**  
**Laurel Canyon Boulevard and Hamlin Street**  
**Los Angeles, California**

Sample Identification			SB-24-7	SB-25-0.5	SB-25-7	SB-26-0.5	SB-26-7	SB-27-2	SB-27-5	SB-27-10
Date Sampled			1/24/2002	1/24/2002	1/24/2002	1/24/2002	1/24/2002	1/25/2002	1/25/2002	1/25/2002
Depth (feet below ground surface)			7	0.5	7	0.5	7	2	5	10
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C										
Semi-Volatile Organics	Unit									
N-Nitrosodimethylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethyl) Ether	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroisopropyl) Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
3/4-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethoxy) Methane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloro-1,3-Butadiene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	mg/kg	1.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND



Table 7  
Summary of Soil Analytical Data - SVOCs  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification		SB-24-7	SB-25-0.5	SB-25-7	SB-26-0.5	SB-26-7	SB-27-2	SB-27-5	SB-27-10
Date Sampled		1/24/2002	1/24/2002	1/24/2002	1/24/2002	1/24/2002	1/25/2002	1/25/2002	1/25/2002
Depth (feet below ground surface)		7	0.5	7	0.5	7	2	5	10
MDL		Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C									
Semi-Volatile Organics(cont.)	Unit								
4-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Diethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Fluorene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Azobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-Methylphenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Di-n-Butyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzidine	mg/kg	10	ND	ND	ND	ND	ND	ND	ND
Pyrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Pyridine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Butyl Benzyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Bis(2-Ethylhexyl) Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Chrysene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Di-n-Octyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzo (k) Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (b) Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Pyrene	mg/kg	0.35	ND	ND	ND	ND	ND	ND	ND
Indeno (1,2,3-c,d) Pyrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Dibenz (a,h) Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (g,h,i) Perylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND

Table 7  
Summary of Soil Analytical Data - SVOCs  
Proposed East Valley Middle School No. 1  
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Sample Identification			SB-29-2	SB-29-7	SB-31-0.5	SB-31-7	SB-32-5	SB-32-5-D	SB-32-10	SB-32-10-D
Date Sampled			2/1/2002	2/1/2002	1/23/2002	1/23/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002
Depth (feet below ground surface)			2	7	0.5	7	5	5	10	10
MDL			Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C										
Semi-Volatile Organics	Unit									
N-Nitrosodimethylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethyl) Ether	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroisopropyl) Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
3/4-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-Chloroethoxy) Methane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloro-1,3-Butadiene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	mg/kg	1.5	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND	ND

Table /  
Summary of Soil Analytical Data - SVOCs  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification		SB-29-2	SB-29-7	SB-31-0.5	SB-31-7	SB-32-5	SB-32-5-D	SB-32-10	SB-32-10-D
Date Sampled		2/1/2002	2/1/2002	1/23/2002	1/23/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002
Depth (feet below ground surface)		2	7	0.5	7	5	5	10	10
MDL		Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C									
Semi-Volatile Organics(cont.)	Unit								
4-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Diethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Fluorene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Azobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-Methylphenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Di-n-Butyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzidine	mg/kg	10	ND	ND	ND	ND	ND	ND	ND
Pyrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Pyridine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Butyl Benzyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Bis(2-Ethylhexyl) Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Chrysene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Di-n-Octyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	ND
Benzo (k) Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (b) Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Pyrene	mg/kg	0.35	ND	ND	ND	ND	ND	ND	ND
Indeno (1,2,3-c,d) Pyrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Dibenz (a,h) Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND
Benzo (g,h,i) Perylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	ND

**Table 7**  
**Summary of Soil Analytical Data - SVOCs**  
**Proposed East Valley Middle School No. 1**  
**Laurel Canyon Boulevard and Hamlin Street**  
**Los Angeles, California**

Sample Identification		SB-32-15	SB-32-15-D	SB-33-5	SB-33-10	SB-33-15	SB-34-20	SB-34-30	Conc.
Date Sampled		1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/28/2002	1/28/2002	
Depth (feet below ground surface)		5	15	5	10	15	20	30	
MDL		Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	
EPA 8270C									
Semi-Volatile Organics	Unit								
N-Nitrosodimethylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Aniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Phenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Bis(2-Chloroethyl) Ether	mg/kg	2.5	ND	ND	ND	ND	ND	ND	
2-Chlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
1,3-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
1,4-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Benzyl Alcohol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
1,2-Dichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
2-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Bis(2-Chloroisopropyl) Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
3/4-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
N-Nitroso-di-n-propylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Hexachloroethane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Nitrobenzene	mg/kg	2.5	ND	ND	ND	ND	ND	ND	
Isophorone	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
2-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
2,4-Dimethylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Benzoic Acid	mg/kg	2.5	ND	ND	ND	ND	ND	ND	
Bis(2-Chloroethoxy) Methane	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
2,4-Dichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
1,2,4-Trichlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Naphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	
4-Chloroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Hexachloro-1,3-Butadiene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
4-Chloro-3-Methylphenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
2-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	
1-Methylnaphthalene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	
Hexachlorocyclopentadiene	mg/kg	1.5	ND	ND	ND	ND	ND	ND	
2,4,5-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
2-Chloronaphthalene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
2-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Dimethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Acenaphthylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	
3-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Acenaphthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	
2,4-Dinitrophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	



Table 7  
Summary of Soil Analytical Data - SVOCs  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification		SB-32-15	SB-32-15-D	SB-33-5	SB-33-10	SB-33-15	SB-34-20	SB-34-30	Conc.
Date Sampled		1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/25/2002	1/28/2002	1/28/2002	
Depth (feet below ground surface)		5	15	5	10	15	20	30	
MDL		Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
EPA 8270C									
Semi-Volatile Organics(cont.)	Unit								
4-Nitrophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Dibenzofuran	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
2,4-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
2,6-Dinitrotoluene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Diethyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
4-Chlorophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Fluorene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	
4-Nitroaniline	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Azobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
4,6-Dinitro-2-Methylphenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	
N-Nitrosodiphenylamine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
2,4,6-Trichlorophenol	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
4-Bromophenyl-Phenyl Ether	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Hexachlorobenzene	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Pentachlorophenol	mg/kg	2.5	ND	ND	ND	ND	ND	ND	
Phenanthrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	
Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	
Di-n-Butyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	
Benzidine	mg/kg	10	ND	ND	ND	ND	ND	ND	
Pyrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	
Pyridine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Butyl Benzyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
3,3'-Dichlorobenzidine	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Benzo (a) Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	
Bis(2-Ethylhexyl) Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Chrysene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	
Di-n-Octyl Phthalate	mg/kg	0.5	ND	ND	ND	ND	ND	ND	
Benzo (k) Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	
Benzo (b) Fluoranthene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	
Benzo (a) Pyrene	mg/kg	0.35	ND	ND	ND	ND	ND	ND	
Indeno (1,2,3-c,d) Pyrene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	
Dibenz (a,h) Anthracene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	
Benzo (g,h,i) Perylene	mg/kg	0.4	ND	ND	ND	ND	ND	ND	



Table 8  
Summary of Soil Analytical Data - Physical Properties  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Methods: ASTM D2216, API RP40, ASTM D5084, EPA 9060B										25.0 PSI Confining Stress	
Sample ID	Sample Orientation (1)	Moisture Content (% wt)	Density		Porosity, %Vb (2)		Pore Fluid Saturations, % Pv (3)		Total Organic Carbon (mg/kg)	Native State Effective Permeability to Water (5) (millidarcy)	Native State Effective Hydraulic Conductivity (5) (cmfs)
			Bulk (g/cc)	Grain (g/cc)	Effective	Air Filled	Water	Hydrocarbon			
SB-9-Physical	V	7.1	1.38	2.69	48.7	38.3	21.3	ND<0.1	1800	28.2	2.66E-05
SB-12-Physical	V	5.3	1.50	2.68	43.9	35.6	18.9	ND<0.1	7300	336	3.04E-05
SB-16-Physical	V	6.0	1.49	2.69	44.6	35.3	21.0	ND<0.1	1400	32.6	3.15E-04
SB-29-Physical	V	9.0	1.65	2.72	39.5	24.4	36.2	2.5	500	203	1.90E-04

Table 9  
Summary of Soil Analytical Data - pH  
Proposed East Valley Middle School No. 1  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Sample Identification	SB-28-2	SB-28-7
Date Sampled	1/25/2002	1/25/2002
Depth (feet below ground surface)	2	7
EPA Method 9045C pH	4.12	5.84

Table 10  
Background Soil Sample Concentrations  
for Metals and PRGs  
Francis Polytechnic High School  
12432 Roscoe Boulevard  
Sun Valley, CA 91352

Chemical	Units	Minimum Background Concentration	Maximum Background Concentration	Average Background Concentration
Antimony <sup>a</sup>	mg/kg	5.09U	5.92U	5.34
Arsenic <sup>b</sup>	mg/kg	1.02U	1.64	1.29
Barium	mg/kg	53.5	137	91.8
Beryllium <sup>a</sup>	mg/kg	0.509U	0.592U	0.53
Cadmium <sup>a</sup>	mg/kg	0.509U	0.592U	0.53
Chromium	mg/kg	5.46	16.5	10.26
Cobalt <sup>b</sup>	mg/kg	5.09U	8.51	6.45
Copper	mg/kg	5.98	20.4	12.42
Lead	mg/kg	1.27	13.8	4.09
Molybdenum <sup>a</sup>	mg/kg	4.07U	4.73U	4.27
Nickel <sup>b</sup>	mg/kg	4.07U	12.10	7.44
Selenium <sup>a</sup>	mg/kg	1.02U	1.18U	1.07
Silver <sup>a</sup>	mg/kg	1.02U	1.18U	1.07
Thallium <sup>a</sup>	mg/kg	2.04U	2.37U	2.14
Vanadium	mg/kg	15.4	34.6	23.8
Zinc	mg/kg	19.6	57.7	37.6

Notes:

Values with U were below detection limit.

<sup>a</sup> - All values used to calculate the average concentration contained a U qualifier.

<sup>b</sup> - Some values used to calculate the average concentration contained a U qualifier.

<sup>c</sup> - California Benchmark Soil values taken from Bradford et al., 1996.

mg/kg - milligrams per kilogram

Reference: Table 2, Background Soil Sample Concentrations for Metals and PRGs  
Francis Polytechnic High School (IT, 2000)

Table 11  
Comparison with Background Soil Metal Concentrations  
East Valley Middle School  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Title 22 Metals	Number Detected at Site	Site Maximum Concentration (mg/kg)	Site Mean Concentration (mg/kg)	Standard Deviation	Site 95%UCL Concentration (mg/kg)	Number Background Samples	Background Maximum Concentration (mg/kg)	Background Mean Concentration (mg/kg)	Site Max > Bgnd Max ?	Site Avg > Bgnd Max ?	COPC?
Antimony	21	1.56	0.40	0.19	0.44	6	5.92	5.34	No	No	No
Arsenic	28	1.75	0.43	0.23	0.48	6	1.64	1.29	Yes	No	No
Barium	71	315	88.90	54.60	99.56	6	137	91.8	Yes	No	No
Beryllium	71	0.583	0.20	0.09	0.21	6	0.592	0.53	No	No	No
Cadmium	70	1.25	0.30	0.25	0.35	6	0.592	0.53	Yes	No	No
Chromium (Total)	71	45.6	9.06	5.70	10.18	6	16.5	10.26	Yes	No	No
Cobalt	71	14	6.71	2.79	7.25	6	8.51	6.45	Yes	No	No
Copper	71	51.4	9.50	6.54	10.78	6	20.4	12.42	Yes	No	No
Lead	71	39.3	5.09	6.48	6.36	6	13.8	4.09	Yes	No	No
Molybdenum	40	1.58	0.15	0.25	0.20	6	4.73	4.27	No	No	No
Nickel	71	17.9	6.54	3.05	7.14	6	12.1	7.44	Yes	No	No
Selenium	10	1.64	0.39	0.15	0.42	6	1.18	1.07	Yes	No	No
Silver	3	0.111	0.12	0.01	0.13	6	1.18	1.07	No	No	No
Thallium	0	ND	ND	ND	ND	6	2.37	2.14	No	No	No
Vanadium	71	64.6	22.17	10.57	24.23	6	34.6	23.8	Yes	No	No
Zinc	71	202	39.90	29.08	45.58	6	57.7	37.6	Yes	No	No
Mercury	59	0.245	0.04	0.04	0.04	6	0.118	0.107	Yes	No	No

Notes:

Background soil sample data obtained from the LAUSD Francis Polytechnic High School.

95%UCL = 95 percent upper confidence limit on the arithmetic mean

Table 12  
Toxicity Criteria for Chemicals of Potential Concern  
East Valley Middle School  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Chemical	Chronic Oral Reference Dose (RfDo) [mg/kg-day]		Inhalation Reference Dose (RfDi) [mg/kg-day]		Oral Cancer Slope Factor (CSFo) [mg/kg-day] <sup>-1</sup>		Inhalation Cancer Slope Factor (CSFi) [mg/kg-day] <sup>-1</sup>	
<i>Pesticides</i>								
DDD	NA		NA		2.4E-01	i	2.4E-01	r
DDE	NA		NA		3.4E-01	i	3.4E-01	r
DDT	5.0E-04	i	5.0E-04	r	3.4E-01	i	3.4E-01	i
<i>SVOCs</i>								
Anthracene	3.0E-01	i	3.0E-01	r	NA		NA	
Benzo (a) anthracene	NA		NA		1.2E+00	c	3.9E-01	c
Benzo (a) pyrene	NA		NA		1.2E+01	c	3.9E+00	c
Benzo (b) fluoranthene	NA		NA		1.2E+00	c	3.9E-01	c
Benzo (g,h,i) perylene	3.0E-01	i	3.0E-01	r	NA		NA	
Benzo (k) fluoranthene	NA		NA		1.2E+00	c	3.9E-01	c
Bis (2-ethylhexyl) phthala	2.0E-02	i	2.2E-02	r	3.0E-03	c	8.4E-03	c
Chrysene	NA		NA		1.2E-01	c	3.9E-02	c
Dibenzo (a,h) anthracene	NA		NA		4.1E+00	c	4.1E+00	c
Di-n-butyl phthalate	1.0E-01	i	1.0E-01	r	NA		NA	
Fluoranthene	4.0E-02	i	4.0E-02	r	NA		NA	
Indeno (1,2,3-c,d) pyrene	NA		NA		1.2E+00	c	3.9E-01	
Phenanthrene	3.0E-01	w	3.0E-01	w	NA		NA	
Pyrene	3.0E-02	i	3.0E-02	r	NA		NA	

**Notes:**

c = Cal/EPA Cancer Potency Database 2001

i = Integrated Risk Information System

NA = Not available or not applicable.

r = Oral to Inhalation Route Extrapolation

w = Withdrawn (USEPA, 1999)



Table 13  
Toxicity Criteria for VOC Chemicals of Potential Concern  
East Valley Middle School  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Chemical	Inhalation Reference Dose (RfDi) [mg/kg-day]		Inhalation Reference Conc. (RfC) (ug/cu m)		Inhalation Cancer Slope Factor (CSFi) [mg/kg-day] <sup>-1</sup>		Inhalation Cancer Unit Risk Factor (URF) [ug/cu m] <sup>-1</sup>	
VOCs								
Dichlorodifluoromethane	5.71E-02	p	2.00E+02	p	NA		NA	
Trichlorofluoromethane	2.00E-01	p	7.00E+02	p	NA		NA	
1,1,1-Trichloroethane	2.86E-02	d	1.00E+03	d	NA		NA	
Benzene	1.71E-02	c	6.00E+01	c	1.00E-01	c	2.90E-05	c
Toluene	8.57E-02	c	3.00E+02	c	NA		NA	
Trichloroethene	1.71E-01	c	6.00E+02	c	1.00E-02	c	2.00E-06	c
Tetrachloroethene	1.00E-02	r, i	3.50E+01	d	2.10E-02	c	5.90E-06	c
Ethylbenzene	5.71E-01	c	2.00E+03	c	NA		NA	
p/m Xylene	2.00E-01	c	7.00E+02	c	NA		NA	
Styrene	2.57E-01	c	9.00E+02	c	NA		NA	
o-Xylene	2.00E-01	c	7.00E+02	c	NA		NA	
1,3,5-Trimethylbenzene	1.70E-03	p	6.00E+00	p	NA		NA	
1,2,4-Trimethylbenzene	1.70E-03	p	6.00E+00	p	NA		NA	

**Notes:**

c = Cal/EPA Cancer Potency or Chronic Relative Exposure Levels Database 2001

d = DTSC Soil Screening Johnson & Ettinger vapor intrusion modeling program, VLOOKUP table, version 1.0, December 2001

i = Integrated Risk Information System

p = USEPA Region 9 Preliminary Remediation Goals website

<[www.epa.gov/Region9/waste/sfund/grg/s4\\_03.htm](http://www.epa.gov/Region9/waste/sfund/grg/s4_03.htm)>

NA = Not available or not applicable

r = Oral to Inhalation Route Extrapolation

Table 14  
Source of Inputs Used for the Johnson and Ettinger  
Soil Gas Vapor Intrusion Model  
East Valley Middle School  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Input Parameter	Value	Source of Value
Depth below grade to bottom of enclosed space floor	15 cm	J&E Default value
Soil gas sampling depth below grade	274-609 cm	Specific for identified contaminants (last digits of sample # are ft bgs)
Avg soil temperature	20.2 °C	Measured site data
Predominant vadose zone SCS soil type	Loamy Sand (LS)	Averaged from boring logs for borings $\geq 10$ ft depth (Appendix A)
Soil dry bulk density	1.46 g/cu cm	Measured physical soils site data (Appendix B)
Soil total porosity	0.457	Measured physical soils site data (Appendix B)
Soil water-filled porosity	0.204	Measured physical soils site data (Appendix B)
Toxicity values	$R_f C_{inh}$ or $URF_{inh}$	OEHHA and IRIS values as shown on enclosed VLOOKUP Table
Physical chemical properties of analytes	varies	Determined from VLOOKUP Table and NIST website

Table 15  
Conversion of Soil Gas Concentration to Soil Concentration for VOCs  
East Valley Middle School  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Volatile Organic Compound	CAS #	Sample Number Containing Maximum Conc.	Maximum Soil Gas Conc. (ug/cu m)	Maximum Soil Gas Conc. (ug/L)	Soil Water Filled Porosity (dimensionless)	Total Soil Porosity (dimensionless)	Henry's Law Constant (dimensionless)	Dry Soil Bulk Density (g/cu cm)	Organic Carbon Part'n Coeff (cu cm/g)	Soil Organic Carbon Content (dimensionless)	Soil Conc. (ug/kg)
Equation Symbol:				$C_G$	$\theta_w$	$n$	$K_H$	$\rho_b$	$K_{oc}$	$f_{OC}$	$C_T$
Dichlorodifluoromethane	75718	SG-4-20	75.38	7.54E-02	0.204	0.457	2.97E-04	1.46	5.80E+01	1.60E-03	5.16E+01
Trichlorofluoromethane	75694	SG-14-20D	171.30	1.71E-01	0.204	0.457	1.26E-03	1.46	1.60E+02	1.60E-03	4.29E+01
1,1,1-Trichloroethane	71556	SG-15-10D	7.76	7.76E-03	0.204	0.457	7.05E-01	1.46	1.10E+02	1.60E-03	4.21E-03
Benzene	71432	SG-10-10	6.17	6.17E-03	0.204	0.457	2.28E-01	1.46	5.89E+01	1.60E-03	6.60E-03
Toluene	108883	SG-10-10	99.58	9.96E-02	0.204	0.457	2.72E-01	1.46	1.82E+02	1.60E-03	1.41E-01
Trichloroethene	79016	SG-11-9D	20.74	2.07E-02	0.204	0.457	4.22E-01	1.46	1.66E+02	1.60E-03	1.94E-02
Tetrachloroethene	127184	SG-11-9D	5789.58	5.79E+00	0.204	0.457	7.54E-01	1.46	1.55E+02	1.60E-03	3.38E+00
Ethylbenzene	100414	SG-15-10D	295.65	2.96E-01	0.204	0.457	3.23E-01	1.46	3.63E+02	1.60E-03	5.43E-01
p/m Xylene	108383	SG-15-10D	1147.31	1.15E+00	0.204	0.457	3.01E-01	1.46	4.07E+02	1.60E-03	2.43E+00
Styrene	100425	SG-15-20D*	11.93	1.19E-02	0.204	0.457	1.13E-01	1.46	7.76E+02	1.60E-03	1.07E-01
o-Xylene	95476	SG-15-10D	485.40	4.85E-01	0.204	0.457	2.13E-01	1.46	3.63E+02	1.60E-03	1.31E+00
1,3,5-Trimethylbenzene	108678	SG-10-20	139.88	1.40E-01	0.204	0.457	1.66E-02	1.46	8.20E+02	1.60E-03	8.77E+00
1,2,4-Trimethylbenzene	95363	SG-10-20	1848.46	1.85E+00	0.204	0.457	1.90E-02	1.46	3.70E+03	1.60E-03	4.08E+02

Legend: CAS# = chemical abstracts number; Conc = concentration; cu cm/g = cubic centimeter per gram; g/cu cm = gram per cubic centimeter;

ug/cu m = microgram per cubic meter; ug/kg = microgram per kilogram; ug/L = microgram per liter.

\* Maximum value for styrene was one half of the detection limit for sample SG-15-20D.

Table 16  
Incremental Cancer Risk Estimated for Ingestion and Dermal Contact with Soil  
Hypothetical On-Site Residential Receptors  
East Valley Middle School  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Chemical	Maximum Soil Chemical Concentration (mg/kg)	Oral Cancer Slope Factor (CSFo) [mg/kg-day] <sup>-1</sup>	Absorption Fraction (unitless)	Oral & Dermal Cancer Risk (unitless)
<i>Pesticides</i>				
DDD	0.0031	2.4E-01	0.03	1.59E-09
DDE	0.0034	3.4E-01	0.03	2.46E-09
DDT	0.019	3.4E-01	0.03	1.38E-08
<i>SVOCs</i>				
Anthracene	0.54	NA	0.15	NA
Benzo (a) anthracene	13	1.2E+00	0.13	6.24E-05
Benzo (a) pyrene	12	1.2E+01	0.13	5.76E-04
Benzo (b) fluoranthene	12	1.2E+00	0.13	5.76E-05
Benzo (g,h,i) perylene	4.2	NA	0.15	NA
Benzo (k) fluoranthene	11	1.2E+00	0.13	5.28E-05
Bis (2-ethylhexyl) phthalate	0.22	3.0E-03	0.1	2.27E-09
Chrysene	13	1.2E-01	0.13	6.24E-06
Dibenzo (a,h) anthracene	1.6	4.1E+00	0.13	2.62E-05
Di-n-butyl phthalate	0.15	NA	0.1	NA
Fluoranthene	14	NA	0.13	NA
Indeno (1,2,3-c,d) pyrene	4.7	1.2E+00	0.13	2.26E-05
Phenanthrene	1.5	NA	0.15	NA
Pyrene	14	NA	0.15	NA
<b>TOTAL INCREMENTAL CANCER RISK</b>				<b>8.0E-04</b>

Notes:

SVOCs = Semivolatile organic compounds

mg/kg = milligrams per kilogram

mg/kg-day = milligram per kilogram per day

NA = Not applicable or not available

Table 17  
Incremental Cancer Risk Estimated for Exposure to Dust Particles in Air  
Hypothetical On-Site Residential Receptors  
East Valley Middle School  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Chemical	Maximum Soil Chemical Concentration (mg/kg)	Inhalation Cancer Slope Factor (CSFi) [mg/kg-day] <sup>-1</sup>	Inhalation Cancer Risk (unitless)
<i>Pesticides</i>			
DDD	0.0031	2.4E-01	5.54E-12
DDE	0.0034	3.4E-01	8.61E-12
DDT	0.019	3.4E-01	4.81E-11
<i>SVOCs</i>			
Anthracene	0.54	NA	NA
Benzo (a) anthracene	13	3.9E-01	3.78E-08
Benzo (a) pyrene	12	3.9E+00	3.49E-07
Benzo (b) fluoranthene	12	3.9E-01	3.49E-08
Benzo (g,h,i) perylene	4.2	NA	NA
Benzo (k) fluoranthene	11	3.9E-01	3.20E-08
Bis (2-ethylhexyl) phthalate	0.22	8.4E-03	1.38E-11
Chrysene	13	3.9E-02	3.78E-09
Dibenzo (a,h) anthracene	1.6	4.1E+00	4.89E-08
Di-n-butyl phthalate	0.15	NA	NA
Fluoranthene	14	NA	NA
Indeno (1,2,3-c,d) pyrene	4.7	3.9E-01	1.37E-08
Phenanthrene	1.5	NA	NA
Pyrene	14	NA	NA
<b>TOTAL INCREMENTAL CANCER RISK</b>			<b>5.2E-07</b>

Notes:

SVOCs = Semivolatile organic compounds

mg/kg = milligrams per kilogram

mg/kg-d = milligram per kilogram per day

NA = Not applicable or not available



Table 18  
Health Hazards Estimated for the Ingestion and Dermal Contact with Soil  
Hypothetical On-Site Residential Receptors  
East Valley Middle School  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Chemical	Maximum Soil Chemical Concentration (mg/kg)	Chronic Oral Reference Dose (RfDo) (mg/kg-day)	Absorption Fraction (unitless)	Oral & Dermal Hazard Index (unitless)
<i>Pesticides</i>				
DDD	0.0031	NA	0.03	NA
DDE	0.0034	NA	0.03	NA
DDT	0.019	5.0E-04	0.03	6.3E-04
<i>SVOCs</i>				
Anthracene	0.54	3.0E-01	0.15	5.8E-05
Benzo (a) anthracene	13	NA	0.13	NA
Benzo (a) pyrene	12	NA	0.13	NA
Benzo (b) fluoranthene	12	NA	0.13	NA
Benzo (g,h,i) perylene	4.2	3.0E-01	0.15	4.5E-04
Benzo (k) fluoranthene	11	NA	0.13	NA
Bis (2-ethylhexyl) phthalate	0.22	2.0E-02	0.1	2.8E-04
Chrysene	13	NA	0.13	NA
Dibenzo (a,h) anthracene	1.6	NA	0.13	NA
Di-n-butyl phthalate	0.15	1.0E-01	0.1	3.8E-05
Fluoranthene	14	4.0E-02	0.13	1.0E-02
Indeno (1,2,3-c,d) pyrene	4.7	NA	0.13	NA
Phenanthrene	1.5	3.0E-01	0.15	1.6E-04
Pyrene	14	3.0E-02	0.15	1.5E-02
<b>TOTAL HEALTH HAZARD</b>				<b>2.7E-02</b>

Notes:

SVOCs = Semivolatile organic compounds

mg/kg = milligrams per kilogram

mg/kg-d = milligram per kilogram per day

NA = Not applicable or not available

Table 19  
Health Hazards Estimated for Inhalation of Dust Particles in Air  
Hypothetical On-Site Residential Receptors  
East Valley Middle School  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Chemical	Maximum Soil Chemical Concentration (mg/kg)	Chronic Inhalation Reference Dose (RfDi) (mg/kg-day)	Absorption Fraction (unitless)	Inhalation Hazard Quotient (unitless)
<b><i>Pesticides</i></b>				
DDD	0.0031	NA	0.03	NA
DDE	0.0034	NA	0.03	NA
DDT	0.019	5.0E-04	0.03	1.2E-06
<b><i>SVOCs</i></b>				
Anthracene	0.54	3.0E-01	0.15	5.8E-08
Benzo (a) anthracene	13	NA	0.13	NA
Benzo (a) pyrene	12	NA	0.13	NA
Benzo (b) fluoranthene	12	NA	0.13	NA
Benzo (g,h,i) perylene	4.2	3.0E-01	0.15	4.5E-07
Benzo (k) fluoranthene	11	NA	0.13	NA
Chrysene	13	NA	0.13	NA
Dibenzo (a,h) anthracene	1.6	NA	0.13	NA
Fluoranthene	14	4.0E-02	0.13	1.1E-05
Indeno (1,2,3-c,d) pyrene	4.7	NA	0.13	NA
Phenanthrene	1.5	3.0E-01	0.15	1.6E-07
Pyrene	14	3.0E-02	0.15	1.5E-05
<b><i>TOTAL HEALTH HAZARD</i></b>				<b>2.8E-05</b>

Notes:

SVOCs = Semivolatile organic compounds

mg/kg = milligrams per kilogram

mg/kg-d = milligram per kilogram per day

NA = Not applicable or not available

Table 20  
Residential Cumulative Risks and Hazards  
East Valley Middle School  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

COPC	Residential Exposure Scenario		
	Residential EPC (mg/kg)	Cancer Risk Adult/Child	Hazard Index Child
<i>Pesticides</i>			
DDD	0.0031	1.6E-09	NA
DDE	0.0034	2.5E-09	NA
DDT	0.019	1.4E-08	6.3E-04
<i>SVOCs</i>			
Anthracene	0.54	NA	5.8E-05
Benzo (a) anthracene	13	6.2E-05	NA
Benzo (a) pyrene	12	5.8E-04	NA
Benzo (b) fluoranthene	12	5.8E-05	NA
Benzo (g,h,i) perylene	4.2	NA	4.5E-04
Benzo (k) fluoranthene	11	5.3E-05	NA
Bis (2-ethylhexyl) phthalate	0.22	2.3E-09	2.8E-04
Chrysene	13	6.2E-06	NA
Dibenzo (a,h) anthracene	1.6	2.6E-05	NA
Di-n-butyl phthalate	0.15	NA	3.8E-05
Fluoranthene	14	NA	1.0E-02
Indeno (1,2,3-c,d) pyrene	4.7	2.3E-05	NA
Phenanthrene	1.5	NA	1.6E-04
Pyrene	14	NA	1.5E-02
<b>TOTAL RISKS and HAZARDS</b>		<b>8.0E-04</b>	<b>2.7E-02</b>

Notes:

\* Includes Incidental Soil Ingestion, Dermal Contact and Inhalation of Dust

EPC = Exposure Point Concentration

COPC = Chemicals of potential concern

mg/kg = milligrams per kilogram

NA = Not applicable or not available

Table 21  
Incremental Cancer Risk Estimated for Exposure to Soil Gas VOCs in  
Indoor Air  
Hypothetical On-Site Residential Receptors  
East Valley Middle School  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Chemical	Maximum Soil Gas Concentration (ug/cu m)	Inhalation Cancer Unit Risk Factor (URFi) [ug/cu m] <sup>-1</sup>	Inhalation Cancer Risk (unitless)
<i>Soil Gas VOCs</i>			
Dichlorodifluoromethane	75.38	NA	na
Trichlorofluoromethane	171.30	NA	na
1,1,1-Trichloroethane	7.76	NA	na
Benzene	6.17	2.90E-05	8.10E-09
Toluene	99.58	NA	na
Trichloroethene	20.74	2.00E-06	1.90E-09
Tetrachloroethene	5789.58	5.90E-06	1.50E-06
Ethylbenzene	295.65	NA	na
p/m Xylene	1147.31	NA	na
Styrene	11.93	NA	na
o-Xylene	485.40	NA	na
1,3,5-Trimethylbenzene	139.88	NA	na
1,2,4-Trimethylbenzene	1848.46	NA	na
<b>TOTAL INCREMENTAL CANCER RISK</b>			<b>1.5E-06</b>

Notes:

VOCs = volatile organic compounds  
ug/cu m = micrograms per cubic meter  
NA = not applicable

Table 22  
Health Hazards Estimated for Inhalation of Soil Gas VOCs in Indoor Air  
Hypothetical On-Site Residential Receptors  
East Valley Middle School  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Chemical	Maximum Soil Gas VOC Concentration  (ug/cu m)	Chronic Inhalation Reference Concentration (RfC) (mg/cu m)	Ambient Air Concentration  (ug/cu m)	Inhalation Hazard Quotient  (unitless)
<i>Soil VOCs</i>				
Dichlorodifluoromethane	75.38	2.00E-01	6.10E-03	2.9E-05
Trichlorofluoromethane	171.30	7.00E-01	1.32E-02	1.8E-05
1,1,1-Trichloroethane	7.76	1.00E+00	8.07E-04	7.7E-07
Benzene	6.17	6.00E-02	6.79E-04	1.1E-05
Toluene	99.58	3.00E-01	1.09E-02	3.5E-05
Trichloroethene	20.74	6.00E-01	2.28E-03	3.7E-06
Tetrachloroethene	5789.58	3.50E-02	6.11E-01	1.7E-02
Ethylbenzene	295.65	2.00E+00	3.02E-02	1.4E-05
p/m Xylene	1147.31	7.00E-01	1.13E-01	1.6E-04
Styrene	11.93	9.00E-01	7.76E-04	8.3E-07
o-Xylene	485.40	7.00E-01	5.31E-02	7.3E-05
1,3,5-Trimethylbenzene	139.88	6.00E-03	9.46E-03	1.5E-03
1,2,4-Trimethylbenzene	1848.46	6.00E-03	1.25E-01	2.0E-02
<b>TOTAL HEALTH HAZARD</b>				<b>3.9E-02</b>

Notes:

VOCs = volatile organic compounds

ug/cu m = micrograms per cubic meter

mg/cu m = milligrams per cubic meter



Table 23  
Incremental Cancer Risk Estimated for Exposure to Soil Gas VOCs in  
Outdoor Air  
Hypothetical On-Site Residential Receptors  
East Valley Middle School  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Chemical	Maximum Calculated Soil VOC Concentration (mg/kg)	Calculated Inhalation Slope Factor (mg/kg-day) <sup>-1</sup>	Inhalation Cancer Risk (unitless)
<i>Soil Gas VOCs</i>			
Dichlorodifluoromethane	5.16E-02	NA	NA
Trichlorofluoromethane	4.29E-02	NA	NA
1,1,1-Trichloroethane	4.21E-06	NA	NA
Benzene	6.60E-06	1.00E-01	1.89E-11
Toluene	1.41E-04	NA	NA
Trichloroethene	1.94E-05	1.00E-02	4.07E-12
Tetrachloroethene	3.38E-03	2.10E-02	2.13E-09
Ethylbenzene	5.43E-04	NA	NA
p/m Xylene	2.43E-03	NA	NA
Styrene	1.07E-04	NA	NA
o-Xylene	1.31E-03	NA	NA
1,3,5-Trimethylbenzene	8.77E-03	NA	NA
1,2,4-Trimethylbenzene	4.08E-01	NA	NA
<b>TOTAL INCREMENTAL CANCER RISK</b>			<b>2.2E-09</b>

Notes:

VOCs = volatile organic compounds

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram per day

NA = not applicable

Table 24  
Health Hazards for Inhalation of Soil Gas VOCs in Outdoor Air  
Hypothetical On-Site Residential Receptors  
East Valley Middle School  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Chemical	Maximum Calculated Soil VOC Concentration (mg/kg)	Chronic Inhalation Reference Dose (RfDi) (mg/kg-day)	Ambient Air Concentration (mg/cu m)	Inhalation Hazard Quotient (unitless)
<i>Soil VOCs</i>				
Dichlorodifluoromethane	5.16E-02	5.71E-02	2.95E-07	3.3E-06
Trichlorofluoromethane	4.29E-02	2.00E-01	9.20E-05	2.9E-04
1,1,1-Trichloroethane	4.21E-06	2.86E-02	1.06E-09	2.4E-08
Benzene	6.60E-06	1.71E-02	1.27E-09	4.7E-08
Toluene	1.41E-04	8.57E-02	1.54E-08	1.1E-07
Trichloroethene	1.94E-05	1.71E-01	2.73E-09	1.0E-08
Tetrachloroethene	3.38E-03	1.00E-02	6.82E-07	4.4E-05
Ethylbenzene	5.43E-04	5.71E-01	4.12E-08	4.6E-08
p/m Xylene	2.43E-03	2.00E-01	1.61E-07	5.2E-07
Styrene	1.07E-04	2.57E-01	3.08E-09	7.7E-09
o-Xylene	1.31E-03	2.00E-01	8.58E-08	2.7E-07
1,3,5-Trimethylbenzene	8.77E-03	1.70E-03	9.66E-08	3.6E-05
1,2,4-Trimethylbenzene	4.08E-01	1.70E-03	2.26E-06	8.5E-04
<b>TOTAL HEALTH HAZARD</b>				<b>1.2E-03</b>

Notes:

VOCs = volatile organic compounds  
mg/kg = milligrams per kilogram  
mg/kg-d = milligram per kilogram per day  
mg/cu m = milligram per cubic meter

Table 25  
Summarized Total Site Cancer Risks and Health Hazards  
East Valley Middle School  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

COPC Class	Cancer Risk Ingestion/Dermal Pathway	Cancer Risk Inhalation Pathway	Health Hazard Ingestion/Dermal Pathway	Health Hazard Inhalation Pathway
Pesticides	1.78E-08	6.22E-11	6.30E-04	1.20E-06
SVOCs	8.00E+04	5.20E-07	2.70E-02	2.69E-05
VOCs (ambient)	NA	2.20E-09	NA	1.20E-03
VOCs (indoor)	NA	1.50E-06	NA	3.90E-02
Subtotal Risks/Hazards	8.00E+04	2.02E-06	2.76E-02	4.02E-02
Total Site Cancer Risk or Health Hazard	8.00E+04		6.79E-02	

**Notes:**

NA = Not applicable

TABLE 26  
Calculation of 95% UCLs for Combined EPA Method TO-14A + 8260 Soil Gas Data and  
Summarized Johnson and Ettinger Risk Estimates  
East Valley Middle School  
Laurel Canyon Boulevard and Hamlin Street  
Los Angeles, California

Metal	Range of Concentrations		Mean Conc <sup>1</sup> (ug/cu m)	S.D.	N	S.E.	t <sub>crit</sub>	95% UCL <sup>2</sup> (ug/cu m)	No. of Detects	Frequency of Detection	CAS #	J&E Cancer Risk <sup>3</sup>	J&E HQ <sup>3</sup>
	Maximum (ug/cu m)	Minimum (ug/cu m)											
Dichlorodifluoromethane	500	4.62	422	179	49	25.6	1.666	465	7	14%	75718	na	1.80E-04
Trichlorofluoromethane	500	1.91	422	179	49	25.6	1.666	465	4	8%	75694	na	4.90E-05
1,1,1-Trichloroethane	500	1.85	419	185	49	26.4	1.666	463	5	10%	71556	na	4.60E-05
Benzene	50	1.12	42	18	49	2.6	1.666	46.3	4	8%	71432	6.10E-08	8.10E-05
Toluene	1000	14.55	843	359	49	51.3	1.666	928	8	16%	108883	na	3.20E-04
Trichloroethene	500	1.80	419	185	49	26.4	1.666	463	2	25%	79016	4.20E-08	8.20E-05
Tetrachloroethene	5790	29.64	855	1091	49	155.9	1.666	1115	12	24%	127184	2.90E-07	3.20E-03
Ethylbenzene	500	11.91	431	163	49	23.3	1.666	470	8	16%	100414	na	2.30E-05
p/m Xylene	1147	66.19	389	296	49	42.3	1.666	959	8	16%	108383	na	1.30E-04
Styrene	500	2.77	419	185	49	26.4	1.666	463	1	12%	100425	na	3.20E-05
o-Xylene	500	27.80	442	148	49	21.1	1.666	477	8	16%	95476	na	7.20E-05
1,3,5-Trimethylbenzene	500	5.50	424	175	49	25.0	1.666	466	7	14%	108678	na	5.10E-03
1,2,4-Trimethylbenzene	1848	12.99	462	259	49	37.0	1.666	524	8	16%	95636	na	5.70E-03
Sum of Risks or Hazard Quotients:												3.93E-07	0.015

<sup>1</sup> Legend: Conc = concentration; N = number of samples; na = not applicable; S.D. = standard deviation; S.E. = standard error from the mean;  
t<sub>crit</sub> = one tailed t-Test critical value; 95% UCL = 95% upper confidence limit from arithmetic mean calculated using t<sub>crit</sub> shown.

<sup>2</sup> For any given VOC, if it was detected once or more, one-half the analytical detection limit was substituted for all "non-detect" results to enable statistical analysis.  
Soil gas data from EPA Method TO-14A (n = 8) and from EPA Method 8260 (n = 41) were combined to derive 95% UCL values. Although  
EPA Method TO-14A analysis generally has lower detection limits than does the 8260 method, site sampling/analysis was comprehensive using  
EPA Method 8260, whereas only a portion of the site samples were tested using EPA Method TO-14A.

<sup>3</sup> For Johnson & Ettinger modeling, used actual depth at which the highest concentration of each soil gas analyte was measured, and assumed loamy sand  
was SCS soil type.

J & E = Johnson and Ettinger vapor intrusion modeling results for soil gas using DTSC's soil gas J&E screening model (latest version as of Jan. 2002).

Owned By Chart: Sears Holdings Management Corporation

Run By: Spivey, Darryl

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